Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

Official File

CORPORATE

September 23, 2005

In reply refer to: DK-7

Mr. Thomas Wolfe
The Wolfe Firm
AGC Building
1200 Westlake Avenue North
Suite 809
Seattle, WA 98109-3590

RE: FOIA Requests #05-049 and #05-052

Dear Mr. Wolfe:

This letter responds to your Freedom of Information Act requests dated August 2, 2005, and August 9, 2005, designated as FOIA #05-049 and #05-052:

Request #05-049

In your letter you requested the following:

1. All contacts between either Christopher and/or Jennifer Hume, 28606 152nd Avenue S.E., Kent, Washington, and BPA concerning the cutting of trees along the right-of-way on the Hume property since Jan. 1, 2000.

Response: Enclosed are all agency records located in response to this request.

2. All documents which in any manner reference or relate to vegetation and/or tree cutting along the BPA right-of-way on the Hume property since Jan. 1, 2000.

Response: Enclosed are all agency records located in response to this request. However, BPA has withheld labor unit price information from the Contract Task Order under 5 USC § 552(b)(4) ("Exemption 4") of the FOIA. Exemption 4 protects trade secrets, or commercial or financial information that is privileged or confidential and submitted to BPA by another person. Public disclosure of information on the contractor labor rates coupled, with the number of hours worked, might cause competitive harm to the contractor in future competitions by allowing competitors to determine the contractor's overhead costs.

If you desire the labor unit prices to be disclosed, BPA will need to engage in a complete Exemption 4 analysis of the redacted prices. In such a case, the vendor must be contacted for their views on whether they have any objections to disclosure, as required by Executive Order 12,600. If objections are received, BPA will conduct a separate analysis of any objections, as required by Exemption 4.

3. All records of inspections of the trees and/or vegetation along the power line on the easements reflected on the Hume property.

Response: Enclosed are all agency records located in response to this request.

4. All copies of all BPA or other regulations or rules required to be followed by the BPA as to cutting trees or other vegetation within a specific distance or height from the power lines.

Response: Enclosed are BPA's transmission line maintenance (TLM) guidelines and standards pertaining to cutting trees or other vegetation within a specific distance or height from the power lines. No BPA regulations or rules were located in response to this request.

Request # 05-052

In your letter you requested the following:

A. All accident investigation reports and analyses prepared by Bonneville Power Administration or anyone else concerning the fire/explosion which occurred to the Hume residence, 28606 152nd Avenue S.E., Kent, Washington, on July 27, 2005.

Response: Enclosed are all agency records located in response to this request.

If you are dissatisfied with this determination, you may make an appeal within thirty (30) days of receipt of this letter to Director of Office of Hearings and Appeals, Department of Energy, 1000 Independence Avenue S.W., Washington, D.C. 20585. Both the envelope and the letter must be clearly marked "Freedom of Information Act Appeal."

Because processing fees to fulfill these FOIA requests were less than the minimum $15, you will not be charged for this request. If you have any questions regarding this response, you may contact me at 503-230-7303.

Sincerely,

Christina J. Brannon
Freedom of Information Officer

Enclosures

Department of Energy

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Sincerely,

Christina J. Brannon
Freedom of Information Officer

Enclosures

FOIA Request #05-049

Request Item #1:

September 11, 2003 letter to Christopher and Jennifer Hume, notifying of vegetation control project. This was a mass mailing to landowners along the entire line. BPA only has record of the common letter and addressee data base that was merged for the specific addressee.

Department of Energy

Bonneville Power Administration
914 Avenue D
Snohomish, Washington 98290

September 11, 2003

In reply refer to: Tacoma-Covington 3 & 4

«FIRST_NAME» «LAST_NAME»
OR CURRENT LANDOWNER/RESIDENT
«ADDRESS»
«TOWN», «STATE» «ZIP»

Dear Landowner/Resident:

The Bonneville Power Administration (BPA) is planning to conduct a vegetation control project on the Tacoma-Covington 3 & 4, 230 kv Transmission Line, located within King County, WA. BPA will be using a professional contract service to clear brush and trees away from the power-line. The purpose of this vegetation program is to maintain safe and reliable electrical service. The project is scheduled to begin September 22, 2003.

BPA maintains over 500 miles of transmission power lines in the Snohomish District. In order to maintain system reliability and safety, we continually monitor tree and brush conditions along our transmission line right-of-way easements.

NOTE: This form letter is sent to all known property owners on the above transmission line right-of-way. Trees or brushy species on your property may or may **not** be cut depending on the vegetation. The work scheduled to be done this September will include:

- Mowing access roads and structure sites.
- Hand cutting tall growing trees within BPA's right-of-way corridor(s) that can potentially grow into the conductors. Herbicide treatment to control plants that can re-sprout (stump treatment with Garlon 4).
- Low growing noxious weed infestations pose a difficult obstacle or even prevent access by journeymen line maintenance workers. These areas will be cleared by hand or machine. A follow-up herbicide spray treatment may occur when plants have emerged (usually spring through fall).
- No herbicides will be used around waterways, or wetlands. Landowners are urged to call back notifying BPA of any wells, springs or any special easement requirements. The debris is generally lopped and scattered within the right-of-way, and will be pulled back at least 25 feet from streams, waterways or access roads.

If you have any questions, please call (360) 563-0572 and ask for Don Atkinson. No reply is necessary unless you have a specific question or problem. When calling, please have the line name (see first paragraph above), mile, and structure number (number and mile are listed on each steel tower). If replying by mail, please provide a telephone number by which we may reach you. If you do not occupy the land you own, please pass this letter on to the people occupying your land, if applicable.

Sincerely,

Donald F. Atkinson

Donald F. Atkinson
Natural Resource Specialist

FOIA Request #05-049

Request Item #2:

Vegetation projects covering Tacoma-Raver #1 and #2 500 kV Line between Structures 15/1 and 15/2 since January 1, 2000.

- Year 2000 Vegetation Control Project (5/24/00-7/13/00)
  - Vegetation Control Prescription
  - Inspector's Daily Record
  - Contract Statement of Work
  - Contract Task Order

- Year 2003 Vegetation Control Project (9/30/03-10/23/03)
  - Vegetation Control Prescription
  - Inspector's Daily Records
  - Contract Scope of Work
  - Contract Release – Scope of Work

Year 2000 Vegetation Control Project

BONNEVILLE POWER ADMINISTRATION

RIGHT-OF WAY MAINTENANCE

VEGETATION CONTROL PRESCRIPTION

CONTRACTOR: Forest For The Future
TASK ORDER NO.: 00-TFNK-12 (Job No.)

LINE NAME	ADNO	Right of Way Width	Percent Total
TACOMA - RAVER NO. 1	8146		29
TACOMA - RAVER NO. 2	8247		29
TACOMA - COVINGTON NO. 3	8242		21
TACOMA - COVINGTON NO. 4	8244		21

TASK ORDER INFORMATION
DATE COMPLETED:
CONTRACTOR'S SIGNATURE
INSPECTOR'S SIGNATURE

GENERAL INSTRUCTIONS: Cut, Lop and Scatter (C, L & S), Cut and Chip (C & C) or Cut and Stump Treat (C & S) as indicated in the Control Prescription or as directed by the Field Inspector. Do not cut Vine Maple or Willow unless indicated below or directed by the Field Inspector.

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	CONTROL PRESCRIPTION	
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS	(REMARKS)	
subbay	0	198	500	198	2.3		hourly			6	C, L & S and ST- scattered brush need to cut inside fenvr, Kiser Alum.	Notes
1/1	0	720	262.5	720	4.3		hourly			6	C, L & S and ST- scattered brush need to cut inside fenvr, Kiser Alum.	Notes
1/2	0	1062	262.5	1062	6.4		hourly			6	C, L & S and Stump Treat	
1/3	0	647	262.5	647	3.9		hourly			6	C, L & S and Stump Treat	
1/4	0	1200	262.5	1200	7.2		hourly			6	C, L & S and Stump Treat	
1/4	1200	1544	262.5	344	2.1		hourly			6	Select Cut - Cut only cottonwoods, stump treat where appropriate	Notes
1/5	0	1250	262.5	1250	7.5		hourly			12	C, L & S and Stump Treat	Notes
TOTAL	**FOR**	**PAGE**	**1**		**33.7**	**0.0**	**0.0**	**0.0**	**0.0**	**48**		

NOTES: Subbay to 1/2 - Foiliar treat small cottonwoods, DO NOT SPRAY IN ANY WATER

1/5 - Do not cut on bank above the road, below str. 1/5, C, L & S and stump treat the rest

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS	(REMARKS)
TOTAL	**1/1**	**1/5**			**33.7**	**0.0**	**0.0**	**0.0**	**0.0**	**48**	**TACOMA - RAVER NO. 1 & 2**
1/5	1250	1650	262.5	400	2.4	hourly				12	Select Cut - cut only conifers and cottonwoods
2/1	0	400	262.5	400	2.4	hourly				12	Select Cut - cut only conifers and cottonwoods
2/1	400	560	262.5	160	1.0		1.0				C, L & S and Stump Treat
2/2	0	400	262.5	400	2.4		hourly			6	Cut & Treat as needed, check w/landowner - Marion Heiberg
2/2	400	1050	262.5	650	3.9		hourly			12	C, L & S and Stump Treat T&B Agreement - out of compliance Colski, Bernard
2/2	1050	1275	262.5	225	1.4		1.4				C, L & S and Stump Treat
2/3	0	900	262.5	900	5.4		5.4				C, L & S and Stump Treat
2/3	900	1025	262.5	125	0.8		hourly			6	C, L & S and Stump Treat, when possible
2/4	0	1050	262.5	1050	6.3		hourly			15	C, L & S and Stump Treat, when possible See Notes
2/5	0	859	262.5	859	5.2		hourly			12	C, L & S and Stump Treat, when possible
3/1	0	1192	262.5	1192	7.2		hourly			12	C, L & S and Stump Treat, when possible
3/2	0	1100	262.5	1100	6.6		hourly			12	C, L & S and Stump Treat, when possible
3/3	0	1200	262.5	1200	7.2	skip			MC		Skip - will machine cut
3/4	0	893	262.5	893	5.4	skip			MC		Skip - will machine cut
3/5	0	996	262.5	996	6.0	skip			MC		Skip - will machine cut
4/1	0	875	262.5	875	5.3		hourly			6	C, L & S and Stump Treat, when possible
4/2	0	954	262.5	954	5.7		hourly			6	C, L & S and Stump Treat, when possible
4/3	0	525	262.5	525	3.2		hourly			6	C, L & S and Stump Treat, when possible
4/3	525	850	262.5	325	2.0	skip					Skip - Acquadic Center Parking Lot, Need T&B Agreement
4/3	850	925	262.5	75	0.5		hourly			10	Cut & Chip - cut only Cottonwoods and Alders
TOTAL	**FOR**	**PAGE**	**1 & 2**		**113.9**	**0.0**	**7.8**	**0.0**	**0.0**		

NOTES: 2/4 - If possible cut CT's on the right side AOL

3/4 - machine cut to road could machine cut 3/5

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	CONTROL PRESCRIPTION		
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS	(REMARKS)		
TOTAL	**1/1**	**4/3**			**113.9**	**0.0**	**7.8**	**0.0**	**0.0**	**175**	**TACOMA - RAVER NO. 1 & 2**		
4/3	925	1196	262.5	271	1.6		hourly			6	C, L & S and Stump Treat, when possible		
4/4	0	1025	262.5	1025	6.2		hourly			6	C, L & S and Stump Treat, when possible		
4/5	0	1201	263	1201	7.2		hourly			6	C, L & S and Stump Treat, when possible	DT's - cottonwood riht side	
5/1	0	1099	262.5	1099	6.6		hourly			6	C, L & S and Stump Treat, when possible	CT's right side	Notes
5/2	0	1200	262.5	1200	7.2			hourly		10	C & C and Stump Treat, when possible	CT's right side, willow and alder	
5/3	0	1100	262.5	1100	6.6			hourly		10	C & C and Stump Treat, when possible		
5/4	0	800	262.5	800	4.8			hourly		10	C & C and Stump Treat, when possible		
5/5	0	1025	262.5	1025	6.2			hourly		10	C & C and Stump Treat, when possible	Possible CT's left side	
6/1	0	751	262.5	751	4.5			hourly		10	C & C and Stump Treat, when possible		Notes
6/2	0	972	262.5	972	5.9			hourly		10	C & C and Stump Treat, when possible	check holding pond	Notes
6/3	0	800	262.5	800	4.8			hourly		15	C & C and Stump Treat, when possible	324th	Notes
6/4	0	715	262.5	715	4.3			hourly		10	C & C and Stump Treat, when possible		Notes
6/5	0	577	262.5	577	3.5			hourly		15	C & C and Stump Treat, when possible	cut & chip around str.	Notes
6/6	0	310	262.5	310	1.9			hourly		10	C & C and Stump Treat, when possible	cut & chip around str.	Notes
6/6	310	1310	262.5	1000	6.0			hourly		5	C & C and Stump Treat, when possible	Metro park & ride	Notes
7/1	0	1350	262.5	1350	8.1			hourly		10	Cut & Treat as needed	Freeway crossing	Notes
7/1	1350	1670	262.5	320	1.9		hourly			10	Cut & Treat as needed		
7/2	0	650	262.5	650	3.9		hourly			15	Cut & Treat as needed	may need to chip, cotton CT needs to be cut	
7/2	650	1035	262.5	385	2.3		hourly			15	Cut & Treat as needed	Cottonwood CT needs cut at Encroachmnet	Gauf
7/3	0	100	162.5	100	0.4		hourly			5	Cut & Treat as needed	Gauf - needs T&B Agreement	
TOTAL	**FOR**	**PAGE**	**1 to 3**		**208.0**	**0.0**	**7.8**	**0.0**	**0.0**	**[illegible]**			

NOTES: 5/1 - Cut & Chip along 1st street south

6/1 to 7/1 - T&B Agreements NEEDED, **DO NOT CUT** landscaping trees

7/1 - t&b Agreement Needed, check w/landowner

7/3 - Encroachment (Gauf0 fence without gates and sheds

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS	(REMARKS)
TOTAL	**1/1**	**7/3**			**208.0**	**0.0**	**7.8**	**0.0**	**0.0**	**369**	**TACOMA - RAVER NO. 1 & 2**
7/3	100	180	262.5	80	0.5	skip					Skip - T&B Agreement
7/3	180	995	262.5	815	4.9	hourly				6	Cut & Treat as needed
7/4	0	350	262.5	350	2.1	skip					Skip - Pasture, 3 or 4 CT's right side, need clearance
7/4	350	650	262.5	300	1.8	hourly				6	Cut & Treat as needed See Notes
7/5	0	1150	262.5	1150	6.9	hourly				15	Cut & Treat as needed CT's LS & possible DT's See Notes
8/1	0	400	262.5	400	2.4	hourly				10	Cut & Treat as needed CT's LS
8/1	400	875	262.5	475	2.9	hourly				10	Cut & Treat as needed Encroachments - 3 sheds
8/2	0	1050	262.5	1050	6.3	hourly				10	Cut & Treat as needed Encroachment - 1 shed
8/3	0	1250	262.5	1250	7.5	hourly				5	Cut & Treat as needed Encroachment 1 shed
8/4	0	400	262.5	400	2.4	hourly				10	Cut & Treat as needed Encroachment 1 shed DT's LS See Notes
8/4	400	1050	262.5	650	3.9	skip					Skip - grass
8/5	0	925	262.5	925	5.6	hourly				10	Cut & Treat as needed New landowner, old landowner had a T&B, check
9/1	0	750	262.5	750	4.5	hourly				10	Cut & Treat as needed check w/landowner
9/2	0	1300	262.5	1300	7.8	hourly				10	Cut & Treat as needed check w/landowner
9/3	0	1000	262.5	1000	6.0		6.0				C, L & S and Stump Treat, when possible possible CT's or DT's LS
9/4	0	550	262.5	550	3.3		3.3				C, L & S and Stump Treat, when possible
9/4	550	1175	262.5	625	3.8	skip					Skip - Eagle Hardware See Notes
9/5	0	1000	262.5	1000	6.0	hourly					Cut & Treat as needed See Notes
10/1	0	1152	262.5	1152	6.9	hourly				5	C, L & S and Stump Treat, when possible
10/2	0	250	262.5	250	1.5	hourly				5	C, L & S and Stump Treat, when possible
TOTAL	**FOR**	**PAGE**	**1 to 4**		**295.2**	**0.0**	**17.1**	**0.0**	**0.0**		

NOTES: 7/4 & 7/5 - o not cut in T&B Agreement areas, need to check w/landowner(s) who have fenced off their back yards.

8/1 - Cut & Treat around str. 8/3 - DO NOT CUT fruit trees. 8/4 - Need to cut firs or a T&B agreement is needed

8/5 - T&B Agreement, check for compliance! 9/1 - Do Not Cut in T&B Agreement area, need to check trees in yard.

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS	(REMARKS)
TOTAL					**295.2**	**0.0**	**17.1**	**0.0**	**0.0**	**481**	**TACOMA - RAVER NO. 1 & 2**
10/2	250	592	262.5	342	2.1	check				2	Check - Emerald Downs
10/3	0	1100	262.5	1100	6.6	check				2	Check - Emerald Downs
10/4	0	1050	262.5	1050	6.3	check				2	Check - Field
10/5	0	1000	262.5	1000	6.0	hourly				5	Industrial Area, cut and treat around structures CT's LS - pines
11/1	0	375	262.5	375	2.3	check				2	Check - Industrial Area
11/2	0	710	262.5	710	4.3	check				2	Check - Industrial Area
11/3	0	1193	262.5	1193	7.2	check				8	Check w/landowner, trees in parking lot not permited
11/4	0	1075	262.5	1075	6.5	check				5	Play area for Apts, 6 tall trees CT's &DT's RS
11/5	0	400	262.5	400	2.4	check				2	Check - Pasture
11/5	400	775	262.5	375	2.3	Skip					Skip - ESA listed fish stream SEE NOTES
11/6	0	300	262.5	300	1.8	Skip					Skip - ESA listed fish stream
11/6	300	800	262.5	500	3.0	Skip					Skip - Golf Course
11/6	800	1771	262.5	971	5.9		5.9				C, L & S and stump treat
12/1	0	1128	262.5	1128	6.8		6.8				C, L & S and stump treat SEE NOTES
12/2	0	757	262.5	757	4.6	hourly				10	Cut & Treat as necessary, back yards, no permits
12/3	0	717	262.5	717	4.3	hourly				10	Cut & Treat as necessary, back yards, no permits
12/4	0	1000	262.5	1000	6.0	hourly				10	Cut & Treat as necessary, back yards, no permits
12/5	0	1309	262.5	1309	7.9	hourly				10	Cut & Treat as necessary, Reclaim RS, need clearance, Encroachment -2 sheds SEE NOTES
13/1	0	1346	262.5	1346	8.1	skip					Skip - Pasture
13/2	0	1169	262.5	1169	7.0	Skip					Skip - Pasture
TOTAL	**FOR**	**PAGE**	**1 to 5**		**396.6**	**0.0**	**29.8**	**0.0**	**0.0**		

NOTES: 11/5 - DT's right side. There are trees on the East side of the river which need to cut, need to check west side of the river NEED OK FROM ENVIRONMENTAL.

12/1 - Need to machine cut access road TG-REB-AR-12-2R

12/3 - Access blocked east od 112th, new fence, no gate, CT's RS need to remove or landowner needs T&B. 29502 112th, Morris

12/5 - Cut Cottonwoods near pond, may need to chip, DT's RS

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS	(REMARKS)
TOTAL	**1/1**	**13/2**			**396.6**	**0.0**	**29.8**	**0.0**	**0.0**	**551**	**TACOMA - RAVER NO. 1 & 2**
13/3	0	1126	262.5	1126	6.8	hourly				10	Cut fence line as necessary, mostly RS
13/4	0	500	262.5	500	3.0	hourly				5	Tree Farm, cut & treatas needed - area outside tree farm
13/4	500	710	263	210	1.3	hourly				5	Cut & treat as needed, reclaim left side may need clearance
13/5	0	845	262.5	845	5.1	hourly				5	Cut fence line, treat as needed - check w/landowner DT's LS
14/1	0	1281	262.5	1281	7.7	hourly				5	Cut ditch line, treat as needed Reclaim LS NOTES
14/2	0	1271	262.5	1271	7.7	hourly				5	Cut ditch line, treat as needed check w/landowner DT's RS NOTES
14/3	0	500	262.5	500	3.0	hourly				10	C, L & S and stump treat Reclaim LS
14/3	500	1003	262.5	503	3.0	hourly				10	Cut & treat as needed chip along 144th.
14/4	0	200	262.5	200	1.2	Skip					Skip - Pasture and HWY 18
14/4	200	1120	262.5	920	5.5	hourly				10	Cut & stump treat, treat debris as necessary
14/5	0	657	262.5	657	4.0	check				5	Check w/landowned, cut & treat as needed
15/1	0	300	262.5	300	1.8	hourly				5	Cut & treat fence lines, chip as needed
15/1	300	1200	262.5	900	5.4	check					Check - Pasture
15/2	0	1675	262.5	1675	10.1	hourly				10	Check w/landowner, cut & treat as needed
15/3	0	850	262.5	850	5.1	check					Check - field
15/4	0	820	262.5	820	4.9	check					Check - field fee property
				0	0.0						**END OF PROJECT**
				0	0.0						
				0	0.0						
				0	0.0						
TOTAL	**FOR**	**PAGE**	**1 to 6**		**472.2**	**0.0**	**29.8**	**0.0**	**0.0**	636	

NOTES: 14/1 - High brush to DANGER BRUSH AOL of 14/1 under the Tacoma - Raver No. 1

14/2 - Chip along road Note - Property owner AOL of Holman's old place has planted Doug fir along the fence line, they need a T&B or trees have to be removed ,house no. 29427

99-insph.xls, 9/22/98

Corrected Appraisal 9/1/2000 (92.

1552 x 29.50 = 45,784 Invoice No. 67

148 x 10.00 = 1,480

47,264 ÷ 472 = $100.56/AC.

$ 50,096.00

WO = 00006465

ACTIVITY = TWBC

= TWBD

=70%

30%

29

INSPECTOR'S DAILY RECORD
HAND CUT - ACREAGE & HOURLY

CONTRACTOR: Forest for the Future

TASK ORDER NO.: 00AT25966 00-TFNK-12

LINE NAME: Tacoma Covington & Tac Loop.

TASK ORDER SUMMARY

START DATE OF PROJECT	ENDING DATE OF PROJECT	TOTAL ACRES CUT C, L & S ONLY	TOTAL ACRES CUT C, L & S WITH CHEM.	TOTAL Chipper HOURS	TOTAL MAN HOURS FOR THE PROJECT BRUSH CUTTER HRS.	BRUSH CUTTER No. MEN	FALLERS HRS.	FALLERS No. MEN	TOTAL EST. AC.	TOTAL NO. TREES
24 May 00	13 June	250	472	148	1552	8			470	
			722a							

Contractor's Signature: Date:

Inspector's Signature: Date:

C Bostwick

DAILY RECORD:

DATE CUT	LOCATION STR	FROM	TO	ACRES CUT C, L & S ONLY	ACRES CUT C, L & S W/CHEM.	Chipper HOURS	MAN HOURS BRUSH CUTTER HRS.	BRUSH CUTTER No. MEN	FALLERS HRS.	FALLERS No. MEN	EST. No. AC.	NO. TREES	COMMENTS:	INSPEC'S INITALS	CONT'S INITALS
24 May	Sub	1/1		6.6											
6	1/2	1/3		6.4		0	48	6							
25 May	1/3	1/4		3.9											
	1/4	1/5		9.3	↓	0	48 (96)	6							
26 May	1/5	2/1		9.9	36.1										
	2/1	2/2		3.4		4	48	6							
30 May	2/2	2/3		7.7		2	64	8							
31 May	2/3	2/4		6.2		0	64	8							
01 June	2/4	2/5		6/3		8	64	8							
02 June	2/5	3/1		5.2		0	64	8							
	3/1	3/2		7.2			256 (96)								
	3/2	3/3		6.6											
TOTAL Page 1				78.7		16	400								

INSPECTOR'S DAILY RECORD
HAND CUT - ACREAGE & HOURLY

CONTRACTOR: FFTF

TASK ORDER NO.:

LINE NAME: Tar River

DAILY RECORD:

DATE CUT	LOCATION			ACRES CUT		Chipper	MAN HOURS						COMMENTS:	INSPEC'S	CONT'S
							BRUSH CUTTER		FALLERS		EST.	NO.			
	STR	FROM	TO	C, L & S ONLY	C, L & S W/CHEM.	HOURS	HRS.	No. MEN	HRS.	No. MEN	No. AC.	TREES		INITALS	INITALS
	3/3	3/4	7.2												
2 June	3/4		5.4												
3 June	3/5		6.0			8									
	4/1		5.3												
	4/2		5.7												
	4/3		7.3												
5 June	4/4		6.2			8			64	8					
6 June	4/5		7.2												
	5/1		6.6												
	5/2		7.2												
	5/3		6.6												
	5/4		4.8												
	5/5		6.2												
	6/1		4.5												
4 June	6/2		5.9			8			64	8					
TOTAL THIS PAGE			91.9	91.9		24			128						
SUB TOTAL Page(s) (78.7)				78.7		16			400						
TOTAL (all pages)			170.6	170.6		40			528	8					

8.8 8.8 8.8 46

INSPECTOR'S DAILY RECORD
HAND CUT - ACREAGE & HOURLY

CONTRACTOR: FFTF

TASK ORDER NO.:

LINE NAME: Tac. Ran.

DAILY RECORD:

DATE CUT	LOCATION			ACRES CUT		Chipper	MAN HOURS						COMMENTS:	INSPEC'S	CONT'S
							BRUSH CUTTER		FALLERS		EST.	NO.			
	STR	FROM	TO	C, L & S ONLY	C, L & S W/CHEM.	HOURS	HRS.	No. MEN	HRS.	No. MEN	No. AC.	TREES		INITALS	INITALS
T Range	6/3			4.8											
	6/4			4.3											
	6/5			3.5											
7 Jun	6/6			7.9		8			64	8					
8 Jun	7/1			10.0											
	7/2			6.2											
	7/3			5.8											
	7/4			3.9											
8 Range	7/5			6.9		8			64	8					
9 Mtg	8/1			5.3											
	8/2			6.3											
	8/3			7.5											
	8/4			6.3											
7 Range	8/5			5.6		8			64	8					
TOTAL THIS PAGE	84.3			84.3		24			192	8					
SUB TOTAL Page(s)	1-2-6			170.6		40			528						
TOTAL (all pages)	254.9			254.9		64			720	8					

INSPECTOR'S DAILY RECORD
HAND CUT - ACREAGE & HOURLY

CONTRACTOR:

TASK ORDER NO.:

LINE NAME: Tacoma - Rover

DAILY RECORD:

DATE CUT	LOCATION			ACRES CUT		Chipper HOURS	MAN HOURS						COMMENTS:	INSPEC'S	CONT'S
							BRUSH CUTTER		FALLERS		EST.	NO.			
	STR	FROM	TO	C, L & S ONLY	C, L & S W/CHEM.		HRS.	No. MEN	HRS.	No. MEN	No. AC.	TREES		INITALS	INITALS
12 June	9/1			4.5											
	9/2			7.8											
	9/3			6.0	3 Pass BT										
12 June	9/4			3.3		8	6.4	8							
13 June	9/5			6.0		"	"	"							
June	10/1			6.9											
13 June	10/2			2.6		8	6.4								
14 June	10/3			6.6											
	10/4			6.3											
	10/5			6.0											
14 June	11/1			2.3		8	6.4	8							
15 June	11/2			4.3											
	11/3			7.2											
	11/4			6.5											
15 June	11/5			2.4		8	6.4	8							
TOTAL THIS PAGE				78.7		32	256								
SUB TOTAL Page(s) (____)				254.9		64	720								
TOTAL (all pages)				333.6		96	976								

64 4/

INSPECTOR'S DAILY RECORD
HAND CUT - ACREAGE & HOURLY

CONTRACTOR: FFTF

TASK ORDER NO.:

LINE NAME: Tacoma - Rainier

DAILY RECORD:

DATE CUT	LOCATION			ACRES CUT		Chipper HOURS	MAN HOURS						COMMENTS:	INSPEC'S	CONT'S
							BRUSH CUTTER		FALLERS		EST.	NO.			
	STR	FROM	TO	C, L & S ONLY	C, L & S W/CHEM.		HRS.	No. MEN	HRS.	No. MEN	No. AC.	TREES		INITALS	INITALS
16 June	12/1			6.8											
	12/2			4.6											
	12/3			4.3											
16 June	12/4			6.0		8			64	8					
19 June	12/5			7.9											
	13/1			8.1											
19 June	13/2			7.0		8			64	8					
20 June	13/3			6.8											
	13/4			4.3											
20 June	13/5			5.1		8			64	8					
21 June	14/1			7.7											
21 June	14/2			7.7		8									
	14/3			6.0											
	14/4			6.7											
21 June	14/5			4.0		8			64	8					
TOTAL THIS PAGE				93.0		24			256						
SUB TOTAL Page(s) (_____)				333.6		96			976						
TOTAL (all pages)				426.6		120			1232	8					

8.50
40
24

INSPECTOR'S DAILY RECORD
HAND CUT - ACREAGE & HOURLY

CONTRACTOR: FFTF

TASK ORDER NO.:

LINE NAME: Tacoma - Ravor

DAILY RECORD:

DATE CUT	LOCATION			ACRES CUT		Chipper HOURS	MAN HOURS						COMMENTS:	INSPEC'S	CONT'S
							BRUSH CUTTER		FALLERS		EST.	NO.			
	STR	FROM	TO	C, L & S ONLY	C, L & S W/CHEM.		HRS.	No. MEN	HRS.	No. MEN	No. AC.	TREES		INITALS	INITALS
22	15/1			7.2											
22	15/2			10.1				8							
23	15/3			5.1											
23	15/4			4.9				8							
10 July						6	80	8							
11 July						8	80	8							
12 July						8	80	8							
13 July						6	80	8					End Project		
TOTAL THIS PAGE				27.3		28	320	8							
SUB TOTAL Page(s) (_____)				426.6		120	1232			8					
TOTAL (all pages)				453.9		148	1552								

STATEMENT OF WORK
FOR
VEGETATION CONTROL
BY
HAND CUTTING,
MACHINE CUTTING
AND
HERBICIDE TREATMENT
ON
BONNEVILLE POWER ADMINISTRATION
TRANSMISSION LINE RIGHTS-OF WAY,
ACCESS ROADS
AND STRUCTURE SITES

PART A - GENERAL

A.1 OBJECTIVE

The purpose of this Contract is to obtain services for the control of vegetation on transmission line Rights-of-Way (ROW) in designated areas, which is now, or will be, incompatible with transmission line operation and maintenance. All work shall be completed in a manner which minimizes the adverse effects on desirable vegetation and protects the property of the adjacent land owners. This includes all structures (i.e., houses, outbuildings and fences) and landscaping on privately owned property. Vegetation control provides protection of facilities (both government and private) and allows uninterrupted electrical power transmission to all regions of the Pacific Northwest.

A.2 GENERAL REQUIREMENTS

1. The Contractor's right to proceed is subject to the approval of the COTR based on the suitability of the ground to sustain activities without damage or erosion.

2. Work shall be accomplished in accordance with structures identified on the transmission line rights-of-way by structure number or other survey indicators specified in each Task Order and the Vegetation Control Prescription.

3. The Contractor **shall be responsible for determining the project area boundaries** as specified in each Task Order. If the Contractor marks ground locations of the project area, the Contractor shall remove all such markings prior to final payment. Any damage to property outside of the boundaries of the rights-of-way shall be the responsibility of the Contractor.

4. At the end of each day during which herbicides have been used, the Contractor's foreman shall complete and sign or verify and sign a BPA form 1416 (Right-of-Way Field Data Report). The Inspector shall also review and sign the completed BPA form 1416. The Completed form should include hours worked, number of workers, acres cut and chemically treated along with other required information. The Field Inspector may assist the Contractor with filling out the BPA

form 1416, if requested to do so by the Contractor. If herbicides have not been used, the form titled "Inspector's Daily Record" may be completed as an alternative to the BPA Form 1416.

5. All original signed copies of the BPA form 1416 shall be submitted to BPA by the Contractor with the billing invoice. The COTR, Field Inspector, or District Foreman may also request a copy of the form 1416 on a daily basis.

6. The form titled "Inspector's Daily Record", if used, **shall** be completed by the Field Inspector and initialed by both the Contractor and the Field Inspector each day. The completed form shall be signed by both the Contractor and the Field Inspector at the end of the project. The completed "Inspector's Daily Record" form will be used to verify the Contractor's billing invoice. A copy of the "Inspector's Daily Record" will be given to the Contractor and a copy must be submitted along with the billing invoice.

PART B - TECHNICAL

B1. VEGETATION TO BE CONTROLLED

The Contractor shall cut and dispose of all incompatible vegetation, as specified in each Task Order and /or Vegetation Control Prescription (to be provided as an attachment to each Task Order), or as specified by the Field Inspector. This may include trees greater than 9.15 meters (30 feet) in height. Trees greater than 9.15 meters (30 feet) in height or greater than seven inches in diameter may require tree fallers. Danger trees (trees which are on private property outside of the BPA right-of-way) may be required to be cut under this contract. All material cut by the Contractor is the property of the land owner, local Land Management Agency, or BPA. These materials shall not be removed from the rights-of-way unless previously agreed to by the land owner and BPA.

B2. TREATMENT AREAS

A. Transmission Line Rights-Of-Way

The Contractor shall cut all tall growing vegetation greater than 30 centimeters (cm) (1 foot) in height. Tall growing species are defined as those species that will ultimately grow into the minimum approach distance of the conductor.

Willow and Vine Maple will not be cut unless noted in the Task Order or specified in the Vegetation Control Prescription. However, the COTR or Field Inspector may include additional areas of Willow and or Vine Maple which need to be cut to protect the integrity of the transmission line.

B. Structure Sites

The Contractor shall cut all vegetation, except grasses, at structure sites designated for clearing on each Task Order and Vegetation Control Prescription. All debris cut at structure sites, whether specifically designated in the Task Order, shall be removed from the structure site and disposed of in accordance with Section "B4".

C. Access Roads

Access roads are vehicle travel ways used to access the transmission line rights-of-way and structures. Access roads exist both within and outside the transmission line right-of-way boundaries. The Contractor shall be required to cut and dispose of all vegetation as required in each Task Order and Vegetation control Prescription. The width of the access roads to be cleared (including the travelway and, cut and fill slopes) is generally 20 - 30 feet. Access road clearing limits will be provided through an Access Road Profile which will be provided as an attachment to each Task Order.

1. Roads or sections of roads, requiring clearing will be identified in each Task Order, Vegetation Control Prescription or, by the COTR or field inspector at the project site. Drawings may also be provided to the Contractor that depict locations of the access roads to be cut in the Task Order. However, the drawings are advisory only and the work shall be accomplished as specified at the project site.

2. The Contractor shall cut **all vegetation, except grasses,** located in the travelway and **all vegetation; except grasses, herbs and forbs,** located off the travelway on the cut and fill slopes (for access roads both on and off the transmission line right-of-way).

D. Danger Tree Areas

Danger Tree (DT) areas, are areas located off the transmission line right(s)-of-way. The Contractor shall be required to cut trees greater than 9.15 meters (30 feet) in height.

Danger Trees or Danger Tree areas will be noted in the Task Order or specified in the Vegetation Control Prescription. However, the COTR or Field Inspector may include additional areas of Danger Trees which need to be cut to protect the integrity of the transmission line.

B3. TREATMENT METHODS

Through the use of hand cutting, machine cutting and chemical methods, or by a combination thereof, the Contractor shall control the vegetation on the transmission line rights-of-way and access roads, as specified in each Task Order. Specific areas to be treated, and control method(s) will be identified in each Task Order and or Vegetation control Prescription (i.e., transmission line rights-of-way, access roads, and structure sites).

A. Hand Cutting:

1. Transmission Line Rights-Of-Way (Access roads and structure sites treated as part of ROW) - The Contractor shall cut **all tall growing species** (by the use of chain saw, ax, machete, brushhook and similar hand-carried tools) to the right-of-way width specified in each Task Order, regardless of the width previously cut. All trees and brush shall be felled within the right-of-way boundaries. The Contractor may be required to utilize a winch or other acceptable device to ensure that trees to be cut do not endanger personnel, the operation of the transmission line(s) or are not felled into streams, lakes, or swamps.

In areas other than structure sites and access roads, the Contractor shall perform the following:

a. Cut stems in a manner such that stump heights do not exceed 10.16 cm (4 inches) from the ground.

b. All conifers shall be cut below the lowest branch if the branch is below the 10.16 cm (4 inch) height.

c. Transmission line right-of-way debris shall be either lopped and scattered, stacked, or chipped as stated in each Task Order. Disposal of the debris shall be in accordance with the specifications identified in Section "B4", of this Statement of Work.

Within areas described as structure sites and access roads (see Section "3" and "4" below) the Contractor shall perform the following:

a. Cut stems (**tall growing species**-located within the running surface of the access roads and the working area around structures) such that the stump height does not exceed 5.08 cm (2 inches) from the ground.

b. All stumps shall be cut flat, so as not to present a hazard to subsequent right-of-way usage.

c. All stems, branches and debris resulting from this activity shall be removed from the structure sites and access roads.

d. Debris within the structure sites and access roads shall be either lopped and scattered, stacked, or chipped as stated in each Task Order. Disposal of the debris shall be in accordance with the specifications identified in Section B4, of this Statement of Work.

2. **Transmission Line Rights-Of-Way (Where structure sites and access roads are treated separately from the ROW)** - The Contractor shall cut (by the use of chain saw, ax, machete, brushhook and similar hand-carried tools) to the right-of-way width specified in each Task Order, regardless of the width previously cut. All trees shall be felled within the right-of-way boundaries. The Contractor may be required to utilize a winch or other acceptable device to ensure that trees to be cut do not endanger personnel, the operation of the transmission line(s) or are not felled into streams, lakes, or swamps.

a. Cut stems in a manner such that stump heights do not exceed 10.16 cm (4 inches) from the ground.

b. All conifers shall be cut below the lowest branch if the branch is below the 10.16 cm (4 inch) height.

c. All stems, branches and debris resulting from this activity shall be removed from the structure sites and access roads as described in Sections "3" and "4" below.

d. Structure sites and access roads are to be treated as described in Sections "3" and "4" below

e. Transmission line right-of-way debris shall be either lopped and scattered, stacked, or chipped as stated in each Task Order. Disposal of the debris shall be in accordance with the specifications identified in Section "B4", of this Statement of Work.

3. Structure Sites - Through the use of hand cutting methods all vegetation, except grasses, at structure sites shall be cut as specified in each Task Order.

   a. Unless otherwise specified, the Structure Site is defined as:

      - The area within a 10.67 meters (35 feet) radius from the hub of any transmission wood pole structure. Each wood pole structure site consists of approximately one tenth (0.1) of an acre.

      - The area within a 10.67 meters (35 feet) radius from each leg of any transmission steel tower. . Each steel structure site consists of approximately one quarter (0.25) of an acre.

   b. The Contractor shall be required to perform the following at all structure sites that are designated to be cleared:

      - Cut all stems in a manner such that stump heights do not exceed 5.08 cm (2 inches) from the ground line.

      - Cut all conifers below the lowest branch if the branch is below the 5.08 cm (2 inch) height.

      - All stumps shall be cut flat, so as not to present a hazard to subsequent right-of-way usage.

      - Structure site debris shall be removed from the structure site and either lopped and scattered, stacked, or chipped as stated in the Task Order. Disposal of the debris shall be in accordance with the specifications identified in Section "B4", of this Statement of Work.

4. Access Roads - Through the use of hand cutting methods the vegetation along access roads shall be cut as specified in each Task Order. Access roads consist of roads within the transmission line rights-of-way boundary and outside the transmission line rights-of-way boundary. Access roads, requiring clearing, will either be identified in the Task Order or by the COTR or field inspector. The access roads or sections of will either be marked with colored flagging, wood laths, or identified by the COTR or field inspector. Drawings may be provided to the Contractor which depict the approximate locations of the work to be performed. However, the drawings are advisory only, work shall be accomplished as identified on the ground or in accordance with the instructions provided by the COTR or field inspector. The Contractor shall be required to perform the following work on access roads identified in the Task Order:

   a. The Contractor shall cut all vegetation, except grasses, that is within the travelway of the clearing limits.

b. The Contractor shall cut **all vegetation, except grasses, herbs and forbs** located outside the travelway within the clearing limits. See "Exhibit D" for cut and fill slope clearing limits.

c. All brush, trees, windfalls, and other related vegetation within the clearing limits shall be completely severed from the stump.

d. The Contractor shall cut **all** stems in a manner such that:

- The stumps are cut flat so as not to present a hazard to subsequent access road and right-of-way usage.
- The stump height does not exceed 10.16 cm (4 inches) in height above the ground line for stumps located off the roadbed, and 5.08 cm (2 inches) in height for stumps within the roadbed.
- All conifers are cut below the lowest branch if the branch is below 10.16 cm (4 inches) in height off the roadbed and 5.08 cm (2 inches) in height within the roadbed.

e. Tree limbs within the clearing limits that are attached to trees located outside the clearing limits shall be;

- cut to provide a clearance of 4.57 meters (15 feet) above the roadway.
- trimmed as near flush with the trunk as practicable, and
- disposed of outside the clearing limits.

f. All stems, branches, and debris from this activity shall be removed from the access road travel ways and disposed of on the transmission line right-of-way. Disposal of the debris shall be the same as that specified for the encompassing transmission line right-of-way. Disposal of the debris shall be in accordance with the specifications identified in Section "B4", of this Statement of Work.

5. Buffer Strips Near Water - Trees adjacent to bodies of water shall be controlled by methods which will not damage stream banks. No trees shall be felled into or across bodies of water, and any tree or brush accidentally dropped into a body of water shall be removed immediately.

B. Machine Cutting:

Through the use of mechanized cutting methods, or a combination of mechanized and hand-cutting methods, the Contractor shall cut vegetation on the transmission line rights-of-way and access roads, as specified in each Task Order. Specific areas to be treated will be identified in each Task Order (i.e., transmission line rights-of-way, access roads, and structure sites). A groundman shall be provided with each machine, in addition to the machine operator.

The prescriptions for hand cutting shall apply to areas in which machine cutting is accomplished.

C. Side Trimming

Through the use of mechanized cutting methods, or a combination of mechanized and hand-cutting methods, the Contractor shall perform side trimming of trees along the sides of the right-of-way and below the conductors.

1. All trees must be trimmed from ground level to a height of 4.6 meters (15 feet) above the conductor.

2. Any limbs encroaching on the right-of-way clearance will be cut back to the edge of the right-of-way.

3. All debris from side trimming operation shall be either lopped and scattered, stacked or chipped as stated in the Task Order. Disposal of shall be in accordance with the specifications in Section "B4".

4. Equipment must be capable of cutting to a height of at least 18.3 meters (60 feet)

5. Debris that is fallen into or across access roads, structure sites, trail, streams, waterways or drainage channels shall be removed.

D. Herbicide Treatment

No herbicides shall be applied to vegetation located on National Forest or BLM Lands. The contractor shall observe the boundaries of the right-of-way and shall confine all herbicide releases to those boundaries. Stumps must be free of cut brush, dirt and readily visible for treatment and inspection. Because application of herbicides to newly cut stumps prevents resprouting, stumps shall be treated following cutting except, where the use of herbicide solutions will be applied the same day the tree or brush is cut.

The Contractor shall take all precautions necessary to protect persons and property against injury or damage and be responsible for any such injury or damage that occurs as a result of such fault or negligence.

The Contractor shall use the treatment methods identified below to treat the target vegetation:

1. Approved Herbicide Control Methods:

The Contractor shall follow product label directions in applying these methods:

a. Low Volume Foliar treatments are used on brush up to 15 feet tall. Treatments are least effective during very hot weather or when trees are water stressed. Application will generally be made from early summer to late September. Spraying plants with rapidly elongating stems will often result in excessive sprouting.

b. Basal Bark Treatments involves applying the herbicide to the lower 12 to 18 inches of the tree trunk from early spring to mid-fall. Some species can be treated during the winter. Use herbicide spray mixed with oil until the bark is saturated.

c. Cut Stump Treatment involves cutting a tree down and treating the freshly cut surface with herbicide. Cut the top of the stump level to allow uniform herbicide coverage. Thoroughly wet the cambium layer next to the bark so the conducting tissue will carry the herbicide to the roots. On larger trees, treat only the outer 2 to 3 inches of the stump. On trees 3 inches or less in diameter, treat the entire cut surface. Apply treatments immediately after cutting to achieve maximum effectiveness. If application is delayed after cutting, recut the stump and apply the herbicide to live tissue. Treatments may be applied throughout the year, except when snow or water prevent spraying to the ground line. Control may be reduced with treatment during periods of moisture stress as in late summer.

2. Target Vegetation:

The target vegetation consists of the following species:

a. cottonwood,
b. big leaf maple (Note: Vine Maple shall not be treated unless specifically requested in the Vegetation Control Prescription)
c. red alder
d. conifers less than four (4) feet tall.

If the target vegetation is: less than 4 feet, the vegetation can be left standing if controlled by an approved herbicide method. All trees which do not meet this criteria must be cut to standard.

3. Mixing Herbicides:

The Government will supply all herbicides and additives including tracer dye for stump and basal treatments. The field inspector shall be present when herbicide batches are mixed.

All spray mixtures shall not exceed the maximum shown on the herbicide label. The Contractor shall not deviate from the herbicide label.

The Contractor shall add to all herbicide mixes a coloring material to help identify herbicide applications.

4. Application of Approved Herbicides:

a. All herbicide application work shall be done in the presence of the Contractor's superintendent, who shall have in his or her possession a valid herbicide license as required by state law. A copy of this license shall be furnished to the Contracting Officer prior to starting work. The Contractor must be licensed in the state where the work is located.

b. The Contractor shall provide competent supervision and work shall be performed in a skillful manner. The Contractor shall conduct all operations and public contacts in a manner which creates a positive impression of the Government and the Contractor.

c. No herbicide will be applied to any stream or any body of water. The Contractor shall make every attempt to locate all sources of domestic water supplies. Water supplies

contaminated by the Contractor's activities shall be decontaminated at the Contractor's expense, to State specifications. The mixing and loading areas for herbicide control will be at least 200 feet from any water or wetland areas.

d. Herbicide application rates and mixes will be the responsibility of the Contractor. Concurrence from the COTR is required before work begins. In no case shall the mixtures exceed the label rates for a particular herbicide.

e. The Contractor shall apply herbicide in accordance with the standard industry practice (i.e. in a prudent and conscientious fashion in accordance with normal safe practices).

f. Weather may affect application of herbicides. Contractor shall consider weather restrictions described in item 8 before applying herbicides.

5. **Storage and Handling:**

The Contractor shall be solely responsible for all handling, storage, shipping, and safeguarding of all materials. All unmixed herbicides, when left unattended, shall be contained in a locked building, shelter, or substantial enclosure, bin or the like, where they may not easily be maliciously damaged or removed. Herbicide mixture stored in Contractor's equipment shall be adequately protected against theft, unauthorized use, or spillage.

6. Approved Herbicides:

Normally, BPA will provide all herbicides to be used. In instances where BPA does not provide the herbicide, herbicides to be provided by the Contractor shall be approved by the COTR.

7. Buffer Strips:

The Contractor shall observe the following buffer strips during herbicide applications: (Wider buffer strips may be required in some circumstances.)

Herbicide Application Method	Water Buffer Width	Distance To R/W Edge
Foliar	50'	To Edge
Basal	10'	To Edge
Stump	10'	To Edge

8 Weather Restrictions:

a. Applications should not be made when rain is imminent. With most materials, better plant penetration is obtained when the material has time to dry on the plant and be absorbed. Rain may wash the herbicide off the plant before it has a chance to take effect.

b. When making applications to stumps, stumps or trunks must not be frozen or herbicide penetration will be reduced.

c. Weather Restrictions for Herbicide Applications: 3/

Control Method	Max. Temp.	Minimum Humidity	Precip	Wind	Season
Foliar	75°	30%	None	0-5 MPH	Spring/Summer 2/
Stump	-	-		Minimal	Frost free 1/
Basal	75°	30%	Minimal	0-10 MPH	Frost free 1/

1/ Wood must not be frozen to permit penetration.
2/ Or as specified on herbicide label.
3/ Some local, State, or Label restrictions may require stricter requirements.

9. Cleanup:

The Contractor shall clean all empty herbicide containers used on the job in accordance with State regulations and dispose of them in accordance with State law.

10. Reporting:

Right-of-Way Data Field Report (BPA form 1416 furnished by BPA) shall be completed each day by the Contractor and signed. The Contractor's superintendent's name and State herbicide Applicator's License number shall appear on each report. **A copy of this report shall be submitted by the Contractor with the invoice.**

B4. DISPOSAL METHODS

The Contractor shall "lop and scatter", "stack", or "chip" all debris in the project areas as indicated in each Task Order. The Contractor is expressly prohibited from burning any material on BPA transmission line rights-of-way.

A. Lop and Scatter

1. Stems and branches shall not be removed from the transmission line rights-of-way.

2. Tree limbs and branches shall be cut from the entire stem as needed to allow the stem to lie on the ground and that they are not sticking up in the air.

3. All stems, limbs and branches shall be cut into pieces 3.05 meters (10 feet) or less in length.

4. Lop and scatter debris shall not exceed a 45.72 cm (18 inch) depth . Where cut stems and branches form a concentration of fuel that exceeds 45.72 cm (18 inches) above the ground line, they shall be scattered so as to minimize fire hazard. The term "lop and scatter" is commonly used for this activity.

5. All stems, branches, and debris from "lop and scatter" activities shall be removed from the access roads and from around structure sites, and scattered on the transmission line right-of-way as defined above.

6. No stems, branches, or debris shall be disposed of, or otherwise allowed, to enter any body of water, including creeks, streams, stream beds, drainage ways or ditches along the roads. If any debris is deposited in the drainage features identified above, the contractor shall **immediately** remove the debris at no additional cost to BPA.

B. Stack

1. Stems and branches shall not be removed from the transmission line rights-of-way.

2. Tree limbs and branches shall be cut from the stem as needed to allow the stem to lie flat on the ground and in the stack

3. All stem, limbs and branches shall be cut into pieces 3.05 meters (10 feet) or less in length..

4. The piles (stacks) shall be less than 4.57 meters (15 feet) in diameter and 1.83 meters (6 feet) in height.

5. All stems and branches shall be stacked in the same direction to facilitate chipping in the future.

6. All piles (stacks) shall be kept out of the access roads and placed so they do not slide or sluff onto the access roads.

7. No piles (stacks) shall be placed, or otherwise allowed to enter any body of water including; creeks, streams, stream beds, drainage ways or ditches along the roads. If the Contractor or the Contractor's crew places any debris piles such that they can enter any drainage feature identified above, the Contractor shall **immediately** remove the debris at no additional cost to BPA.

C. Chipping

1. The Contractor shall chip all portions of the stems, limbs and branches which are less than or equal to 15.24 cm (6 inches) in diameter created by this project.

2. All stems, limbs and branches shall be chipped within ten (10) working days after cutting or before leaving the project area.

3. This material shall be chipped in a manner such that the dimensions of the chipped debris shall not be greater than 7.62 cm (3 inches) in length and
7.62 cm (3 inches) in width

4. Stems which are too large to be handled by the chipper shall be limbed and the limbs shall be chipped.

5. Chips shall be either disposed of at sites designated by COTR or field inspector or scattered on the right-of-way. If scattered on the right-of-way, the piles shall not exceed 42.25 cm (18 inches) in depth.

6. For debris, requiring chipping, on access roads located off the transmission line rights-of-way, the Contractor shall have two options for disposal of the debris and shall inform the COTR or field inspector of the chosen method. The Contractor shall either:

   a. remove the debris from the access road and chip it at a designated disposal area, or

   b. chip the debris on site into a bin truck and then dump the chips at a designated disposal area.

7. No chipping debris shall be disposed of, or otherwise allowed, to enter any body of water, including creeks, streams, stream beds, drainage ways or ditches along the roads. If the Contractor deposits any chipping debris in an identified drainage feature. The Contractor shall remove the chipping debris at no additional cost to BPA.

D. Mulching

1. The Contractor shall mulch all portions of the stem branches which are less than or equal to 15.24 cm (6 inches) in diameter created by this effort.

2. This material shall be mulched in a manner such that the dimensions of the mulched debris shall not be greater than 60.69 cm (24 inches) in length and 15.24 cm (6 inches) in diameter.

3. Stems which are too large to be handled by the hydraulic powered brush cutter shall be limbed and the limbs shall be mulched.

4. Mulched debris shall be scattered on the right-of-way. Piles of such debris shall not exceed 42.25 cm (18 inches) in depth.

5. No mulched debris shall be disposed of in any body of water, including creeks, streams, stream beds, drainage ways or ditches along the roads. When mulching along streams, the Contractor shall keep the closed side of the mulching deck towards the stream to prevent debris from getting into the stream or other body of water.

BPA F 4220.32e
(05-94)
(Prior editions unusable after 10/1/93)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
TASK ORDER

Electronic Form Approved by CGIR - 05/20/94(VB)

1. ISSUED BY

U.S. Department Of Energy
Bonneville Power Administration
P.O. Box 491
Vancouver, WA 98666-0491

Invoices / Correspondence Must List Numbers From Items 3A and 3C.

3A. Task Order Number	00AT25966	3B. Mod Number	1
3C. Under Contract Or Agreement Number	98AK08662		

4. FOR BPA USE ONLY — JOB NUMBER: 00-TFNK-12

2A. CONTRACTOR NAME AND ADDRESS (Include 9-Digit ZIP Code)

Forest For The Future, Inc.
10695 Brick Road S.E.
Turner, Oregon 97392

5. PRICING
- ☐ A. Firm Fixed Price
- ☒ B. Time and Materials
- ☐ C. Other (Specify)

6. REQUIRED PAYMENT METHOD
- ☐ A. Single
- ☒ B. Partial/Progress

2B. TELEPHONE NUMBER (Include Area Code)

(503) 743-2355

7. PERFORMANCE PERIOD

April 24, 2000 - July 31, 2000

8. STATEMENT OF WORK (Attach additional sheets, if necessary)

Unprotected Form Field

The Contractor shall provide all labor, materials, equipment and supplies necessary to perform additional vegetation control activities identified in the field and indicated herein on the Tacoma-Raver Corridor (500kV) transmission line rights-of-way.

SCHEDULE. Please furnish the following in accordance with the Master Contract/Agreement.

9. ITEM NO.	10. ITEM DESCRIPTION (Labor Category, Travel, Materials, Etc.)	11. QUANTITY	12. UNIT	13. UNIT PRICE	14. AMOUNT
002	General Labor				$25,960.00

<Redacted>

RECAPITULATION

Original Estimated Cost	$23,667.00
Increase by this Modification 1	25,960.00
Total Estimated Cost	

Completed 8/10/2000
Approved 9/1/2000 (0952)

15. This Order Is Not Valid Until Signed By BPA.
- ☒ A. The contractor need not sign this order. The contractor's performance will constitute acceptance.
- ☐ B. The contractor shall return one signed copy to the office identified in block 1 within ____ days.

16. TOTAL VALUE
- A. Fixed Amount: $ ~~$50,096~~
- B. Ceiling - Not to Exceed: $ 49,627.00

17. CONTRACTOR
- A. SIGNATURE
- B. DATE (MM/DD/YY)
- C. NAME AND TITLE OF SIGNER

18. BONNEVILLE POWER ADMINISTRATION
- A. SIGNATURE
- DATE (MM/DD/YY): 6/29/00
- C. NAME OF CONTRACTING/ORDERING OFFICER: Robert W. Gable
- D. PHONE NO.: (360) 418-2471

FOR BPA USE ONLY

19. ACCOUNTING DATA	A. ORG.	B. OBJECT	C. ACTIVITY	D. PL-6	E. REQUISITION
	TFNK	65	MC5C	M341	00PR24649

BPA F 3.32e
(05-94)
(Prior editions unusable after 10/1/93)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
TASK ORDER

Electronic Form Approved by CGIR - 05/20/94(VB)

1. ISSUED BY

U.S. Department Of Energy
Bonneville Power Administration
P.O. Box 491
Vancouver, WA 98666-0491

Invoices / Correspondence Must List Numbers From Items 3A and 3C.

3A. Task Order Number	00AT25966	3B. Mod Number	Mod #1
3C. Under Contract Or Agreement Number	98AK08662		
4. FOR BPA USE ONLY		JOB NUMBER	00TFNK-12

2A. CONTRACTOR NAME AND ADDRESS (Include 9-Digit ZIP Code)

Forest For The Future, Inc.
10695 Brick Road S.E.
Turner, Oregon 97392

5. PRICING
- [ ] A. Firm Fixed Price
- [x] B. Time and Materials
- [ ] C. Other (Specify)

6. REQUIRED PAYMENT METHOD
- [ ] A. Single
- [x] B. Partial/Progress

2B. TELEPHONE NUMBER (Include Area Code)
(503) 743-2355

7. PERFORMANCE PERIOD
April 24, 2000 - July 31, 2000

8. STATEMENT OF WORK (Attach additional sheets, if necessary)

Unprotected Form Field

The Contractor shall provide all labor, materials, equipment and supples necessary to perform vegetation control indicated herein on the Tacoma-Raver Corridor (500kV) transmission line rights-of-way. Work to be coordinated through Don Atkinson (206) 730-3279.

1680 hrs Ned 148 chipper hrs
Ned 1848 man hours

SCHEDULE. Please furnish the following in accordance with the Master Contract/Agreement.

9. ITEM NO.	10. ITEM DESCRIPTION (Labor Category, Travel, Materials, Etc.)	11. QUANTITY	12. UNIT	13. UNIT PRICE	14. AMOUNT
001	Cut, lop and scatter with herbicide treatment for stumps			[Redacted]	$3,427.00
002	General labor	49,560			$18,880.00
003	Chipper/truck				$1,360.00

[Redacted]

[Redacted]

15. This Order Is Not Valid Until Signed By BPA.
- [x] A. The contractor need not sign this order. The contractor's performance will constitute acceptance.
- [ ] B. The contractor shall return one signed copy to the office identified in block 1 within ____ days.

16. TOTAL VALUE
- A. Fixed Amount $ 23,667.00
- B. Ceiling - Not to Exceed $

17. CONTRACTOR
- A. SIGNATURE
- B. DATE (MM/DD/YY)
- C. NAME AND TITLE OF SIGNER

18. BONNEVILLE POWER ADMINISTRATION
- A. SIGNATURE: Robert W. Gable
- DATE (MM/DD/YY): 4/28/00
- C. NAME OF CONTRACTING/ORDERING OFFICER: Robert W. Gable
- D. PHONE NO.: (360) 418-2471

FOR BPA USE ONLY

19. ACCOUNTING DATA	A. ORG.	B. OBJECT	C. ACTIVITY	D. PL-6	E. REQUISITION
	TFNK	65	MC5C	M341	00PR25966

BPA F 4250.11e
(10-96)
(Previously BPA 301, BPA f 4250.07e)
(Previous editions unusable)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
PURCHASE REQUEST / RECEIVING REPORT

File Copy

Electronic Form Approved by CGIR 10/17/96

1. TITLE	2. DATE	3. PAGE
Natural Resource Specialist - Snohomish	4/20/2000	1 OF 1

FOR PROCUREMENT USE ONLY

SUPPLIER NAME AND ADDRESS, NAME OF CONTACT, AND PHONE NO.

Forest For The Future. Inc.
10695 Brick Rd. SE
Turner, OR 97392 503-743-2355

4. REFERENCE / JOB NUMBER(S)	6. FY	PR	7. SERIAL NUMBER	8. SUPP.
00-TFNK-12	00		259166	

5. DATE WANTED: 4/24/00 through 7/30/00

9. ORIGINATOR'S PR NUMBER:

10. ITEM NO.	11. BPA CAT NO.	12. DESCRIPTION (Include Manufacturer and Part No., if applicable)	13. QTY.	14. UNIT	15. ESTIMATED PRICE PER UNIT	15. ESTIMATED PRICE TOTAL	16. ORG	17. OBJ	18. ACTV	19. PL-6	20. END ITEM	21. PORG
		ESTIMATED COSTS										
		Cut, Lop and Scatter and stump treat				$ 3,427.00	TFNK	65	MC5C	M341		
		General Labor				$ 18,880.00	TFNK	65	MC5C	M341		
		Chipper/Chip Truck				& 1,360.00	TFNK	65	BC5C	M341		

< Redacted >

22A. DATA ENTRY BY	22B. DATE	22C. RECEIVING NOTES	PR TOTAL	$23,667.00

23. PARTIAL DELIVERIES
- ☐ A. Are Authorized
- ☐ B. Are Not Authorized

24. SPEC OR DRAWING?
- ☐ YES (Attach Drawing/Spec)
- ☐ NO

26. I certify that: (1) Budget authority in the amounts cited above is available; (2) The goods /services requested are for BPA program purposes; (3) Any land rights, environmental clearances, or permits required, and to be obtained by BPA, have been obtained; (4) Any other required approvals, such as information services, Administrative services, Property Management, Publications, etc., have been obtained and are on file.

Exceptions:

A. SIGNATURE: Donald F. Atkinson B. DATE: 4/20/2000

C. TYPED NAME (First, MI, and Last) And TITLE
Donald F. Atkinson
Natural Resource Specialist

25. For Additional Information on this PR, Call:

A. NAME (First, MI, and Last): Dave Norgaarg, Foreman III, Covington

B. PHONE NUMBER: (253) 631-9151

C. ORG. CODE: TFNK

27. FOR PROCUREMENT USE ONLY

A. BUSINESS TYPE	B. ORDER DATE	C. ORDER TYPE
D. ORDERED BY		
E. DEL. DUE DATE	F. TERMS	G. FOB

28. RECEIVING INFORMATION

I certify that the articles listed hereon were received in good condition.

A. DELIVER TO (Include Phone Number)
Provide all equipment and labor to cut and treat brush on the Tacoma - Raver 500kv Corridor upder Contract No. 98AK08662, from 1/1 to 15/5.

B. RECEIVING POINT

C. RECEIVED BY (Name, Date)

D. INSPECTOR (Name, Date)

E. PICKED UP BY (Name, Date)

29. EQUIPMENT NUMBER(S)

Atkinson, Donald F - TFN

From: Atkinson, Donald F - TFN

Sent: Thursday, May 11, 2000 7:37 AM

To: LaRonge, Gary - KGC; Sweet, Robert D - TFNF; Hoxworth, Dennis L - TFNK; Bostwick, Clint A - TFN

Subject: Brush Cutting

Gary, I currently have 3 projects going and 1 that will start on Monday. The 3 that are in progress are as follows:

Snohomish District

Select Logging (currently working) - machine cutting black berries and low brush around the Snohomish Substation.

Foresr For The Future(currently working) - Hand cutting and treating access roads and structure sites on the Monroe - Custer corridor from Monroe to the Skagit River.

Covington District

Asphlundh (currently working) - cutting DT's and CT's at various location on the Covington District, you will need to check with either Clint or myself to find out where they are working.

Forest For The Future (will start on May 15th.) - Hand cutting and treating brush on the Tacoma - Covington Corridor from the Tacoma Sub to the Covington Sub.

If you have any question please give me a call at 206-730-32798 or call Clint at 206-730-3283.

Thanks Don

Year 2003 Vegetation Control Project

BONNEVILLE POWER ADMINISTRATION

RIGHT-OF WAY MAINTENANCE

VEGETATION CONTROL PRESCRIPTION

CONTRACTOR: FRANKLIN CONTACTING
TASK ORDER NO.: 9528-029

LINE NAME
Tacoma - Raver No. 1

Resources	Abbrev.
Steep Slope	SS
Riparian	R
Riparian T&E	RT&E
Select Tree Cut	STC

TASK ORDER INFORMATION
DATE COMPLETED:
CONTRACTOR'S SIGNATURE
INSPECTOR'S SIGNATURE

Machine Cut all Access Roads and Structure Sites.

GENERAL INSTRUCTIONS: Cut, Lop and Scatter (C, L & S), Cut and Chip (C & C) or Cut and Stump Treat (C & S) as indicated in the Control Prescription or as directed by the Field Inspector. Do not cut Vine Maple or Willow unless indicated below or directed by the Field Inspector.

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
1/1	0	720	262.5	720	4.3		4.3					C, L, & S Stump Treat
1/2	0	1062	262.5	1062	6.4		6.4					C, L, & S Stump Treat
1/3	0	647	262.5	647	3.9		3.9					C, L, & S Stump Treat
1/4	0	240	262.5	240	1.4		1.4					C, L, & S Stump Treat
1/4	240	760	262.5	520	3.1	3.1					R	C, L, & S Creek No Herbicides
1/4	760	1280	262.5	520	3.1		3.1					C, L, & S Stump Treat
TOTAL	FOR	PAGE	1		22.4	3.1	19.1	0.0	0.0	0		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
TOTAL					**22.4**	**3.1**	**19.1**	**0.0**	**0.0**	**0**		
1/4	1280	1544	262.5	264	1.6		1.6				SS	C, L, & S Stump Treat
1/5	0	1649	262.5	1649	9.9		9.9				SS	C, L, & S Stump Treat
2/1	0	510	262.5	510	3.1		3.1				SS	C, L, & S Stump Treat
2/1	510	560	262.5	50	0.3		0.3					C, L, & S Stump Treat
2/2	0	250	262.5	250	1.5		1.5					C, L, & S Stump Treat
2/2	250	310	262.5	60	0.4		Skip				Skip	Skip - T&B Agreement
2/2	310	870	262.5	560	3.4		Skip				Skip/SS	Skip - T&B Agreement
2/2	870	910	262.5	40	0.2		0.2				SS	C, L, & S Stump Treat
2/2	910	1275	262.5	365	2.2		2.2					C, L, & S Stump Treat
2/3	0	1025	262.5	1025	6.2		6.2					C, L, & S Stump Treat
2/4	0	1050	262.5	1050	6.3		6.3					C, L, & S Stump Treat
2/5	0	859	262.5	859	5.2		5.2					C, L, & S Stump Treat
3/1	0	1192	262.5	1192	7.2		7.2					C, L, & S Stump Treat
3/2	0	120	262.5	120	0.7		0.7					C, L, & S Stump Treat
3/2	120	200	262.5	80	0.5		Skip				Skip	Skip - T&B Agreement
3/2	200	620	262.5	420	2.5		2.5					C, L, & S Stump Treat
3/2	620	820	262.5	200	1.2	1.2					R	C, L, & S Wetland No Herbicides
3/2	820	1100	262.5	280	1.7		1.7					C, L, & S Stump Treat
3/3	0	1200	262.5	1200	7.2		7.2					C, L, & S Stump Treat
TOTAL	**FOR**	**PAGE**	**1 & 2**		**83.7**	**4.3**	**74.9**	**0.0**	**0.0**	**0**		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
TOTAL					**83.7**	**4.3**	**74.9**	**0.0**	**0.0**	**0**		
3/4	0	220	262.5	220	1.3		1.3					C, L, & S Stump Treat
3/4	220	260	262.5	40	0.2		Skip				Skip	Skip - T&B Agreement
3/4	260	894	262.5	634	3.8		3.8					C, L, & S Stump Treat
3/5	0	996	262.5	996	6.0		6.0					C, L, & S Stump Treat
4/1	0	875	262.5	875	5.3		5.3					C, L, & S Stump Treat
4/2	0	954	262.5	954	5.7		5.7					C, L, & S Stump Treat
4/3	0	90	262.5	90	0.5		0.5					C, L, & S Stump Treat
4/3	90	1196	262.5	1106	6.7		6.7				SS	C, L, & S Stump Treat
4/4	0	400	262.5	400	2.4		2.4				SS	C, L, & S Stump Treat
4/4	400	1025	262.5	625	3.8		3.8					C, L, & S Stump Treat
4/5	0	425	262.5	425	2.6		2.6					C, L, & S Stump Treat
4/5	425	1201	262.5	776	4.7		4.7				SS	C, L, & S Stump Treat
5/1	0	1099	262.5	1099	6.6		6.6					C, L, & S Stump Treat
5/2	0	1200	262.5	1200	7.2		7.2					C, L, & S Stump Treat
5/3	0	1100	262.5	1100	6.6		6.6					C, L, & S Stump Treat
5/4	0	230	262.5	230	1.4		1.4					C, L, & S Stump Treat
5/4	230	280	262.5	50	0.3		Skip				Skip	Skip - T&B Agreement
5/4	280	520	262.5	240	1.4		Skip				Skip/SS	Skip - T&B Agreement
5/4	520	800	262.5	280	1.7		Skip				Skip	Skip - T&B Agreement
5/5	0	120	262.5	120	0.7		Skip				Skip	Skip - T&B Agreement
TOTAL	**FOR**	**PAGE**	**1 to 3**		**152.7**	**4.3**	**139.5**	**0.0**	**0.0**	**0**		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
TOTAL					**152.7**	**4.3**	**139.5**	**0.0**	**0.0**	**0**		
5/5	120	470	262.5	350	2.1	Skip					Skip/R	Skip - T&B Agreement Wetland
5/5	470	800	262.5	330	2.0		Skip					Skip - T&B Agreement
5/5	800	940	262.5	140	0.8		0.8					C, L, & S Stump Treat
5/5	940	1025	262.5	85	0.5		Skip				Skip	Skip - T&B Agreement
6/1	0	250	262.5	250	1.5		Skip				Skip	Skip - T&B Agreement
6/1	250	751	262.5	501	3.0		3.0					C, L, & S Stump Treat
6/2	0	973	262.5	973	5.9		5.9					C, L, & S Stump Treat
6/3	0	800	262.5	800	4.8		4.8					C, L, & S Stump Treat
6/4	0	715	262.5	715	4.3		4.3					C, L, & S Stump Treat
6/5	0	120	262.5	120	0.7		0.7					C, L, & S Stump Treat
6/5	120	340	262.5	220	1.3		Skip				Skip	Skip - T&B Agreement
6/5	340	577	262.5	237	1.4		1.4					C, L, & S Stump Treat
6/6	0	1310	262.5	1310	7.9		7.9					C, L, & S Stump Treat
7/1	0	690	262.5	690	4.2		4.2					C, L, & S Stump Treat
7/1	690	790	262.5	100	0.6	0.6					R	C, L, & S Wetland No Herbicides
7/1	790	890	262.5	100	0.6	0.6					R/SS	C, L, & S Wetland No Herbicides
7/1	890	960	262.5	70	0.4	0.4					R	C, L, & S Wetland No Herbicides
7/1	960	1190	262.5	230	1.4		1.4					C, L, & S Stump Treat
7/1	1190	1420	262.5	230	1.4		1.4				SS	C, L, & S Stump Treat
7/1	1420	1450	262.5	30	0.2	0.2					R/SS	C, L, & S Wetland No Herbicides
TOTAL	**FOR**	**PAGE**	**1 to 4**		**197.8**	**6.1**	**175.3**	**0.0**	**0.0**	**0**		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
TOTAL					**197.8**	**6.1**	**175.3**	**0.0**	**0.0**	**0**		
7/1	1450	1670	262.5	220	1.3	1.3					R	C, L, & S Wetland No Herbicides
7/2	0	150	262.5	150	0.9	0.9					R	C, L, & S Wetland No Herbicides
7/2	150	1035	262.5	885	5.3		5.3					C, L, & S Stump Treat
7/3	0	995	262.5	995	6.0		6.0					C, L, & S Stump Treat
7/4	0	650	262.5	650	3.9		3.9					C, L, & S Stump Treat
7/5	0	330	262.5	330	2.0		2.0					C, L, & S Stump Treat
7/5	330	530	262.5	200	1.2		Skip				Skip	Skip - T&B Agreement
7/5	530	730	262.5	200	1.2		Skip				Skip	Skip - T&B Agreement
7/5	730	1150	262.5	420	2.5		2.5					C, L, & S Stump Treat
8/1	0	975	262.5	975	5.9		5.9					C, L, & S Stump Treat
8/2	0	1050	262.5	1050	6.3		6.3					C, L, & S Stump Treat
8/3	0	1040	262.5	1040	6.3		6.3					C, L, & S Stump Treat
8/3	1040	1250	262.5	210	1.3		Skip				Skip	Skip - T&B Agreemer
8/4	0	100	262.5	100	0.6		Skip				Skip	Skip - T&B Agreement
8/4	100	1050	262.5	950	5.7		5.7					C, L, & S Stump Treat
8/5	0	925	262.5	925	5.6		5.6					C, L, & S Stump Treat
9/1	0	750	262.5	750	4.5		4.5					C, L, & S Stump Treat
TOTAL	**FOR**	**PAGE**	**1 to 5**		**258.4**	**8.3**	**229.3**	**0.0**	**0.0**	**0**		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
TOTAL					**258.4**	**8.3**	**229.3**	**0.0**	**0.0**	**0**		
9/2	0	1300	262.5	1300	7.8		7.8					C, L, & S Stump Treat
9/3	0	110	262.5	110	0.7		0.7					C, L, & S Stump Treat
9/3	110	480	262.5	370	2.2		2.2				SS	C, L, & S Stump Treat
9/3	480	810	262.5	330	2.0	2.0					STC	Select Tree Cut No Herbicides
9/3	810	1000	262.5	190	1.1		1.1				SS	C, L, & S Stump Treat
9/4	0	610	262.5	610	3.7		3.7				SS	C, L, & S Stump Treat
9/4	610	1175	262.5	565	3.4		3.4					C, L, & S Stump Treat
9/5	0	1000	262.5	1000	6.0		6.0					C, L, & S Stump Treat
10/1	0	1152	262.5	1152	6.9		6.9					C, L, & S Stump Treat
10/2	0	592	262.5	592	3.6		3.6					C, L, & S Stump Treat
10/3	0	230	262.5	230	1.4		1.4					C, L, & S Stump Treat
10/3	230	1000	262.5	770	4.6	4.6					R	C, L, & S Storage Pond No Herbicides
10/3	1000	1100	262.5	100	0.6		0.6					C, L, & S Stump Treat
10/4	0	1050	262.5	1050	6.3		6.3					C, L, & S Stump Treat
10/5	0	1000	262.5	1000	6.0		6.0					C, L, & S Stump Treat
11/1	0	375	262.5	375	2.3		2.3					C, L, & S Stump Treat
11/2	0	710	262.5	710	4.3		4.3					C, L, & S Stump Treat
11/3	0	300	262.5	300	1.8		1.8					C, L, & S Stump Treat
11/3	300	920	262.5	620	3.7		Skip				Skip	Skip - T&B Agreement
11/3	920	1193	262.5	273	1.6		7.2					C, L, & S Stump Treat
11/4	0	420	262.5	420	2.5		2.5					C, L, & S Stump Treat
TOTAL	**FOR**	**PAGE**	**1 to 6**		**331.1**	**14.9**	**297.1**	**0.0**	**0.0**	**0**		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION		
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)		
TOTAL					**331.1**	**14.9**	**297.1**	**0.0**	**0.0**	**0**				
11/4	420	1075	262.5	655	3.9	3.9					R	C, L, & S	Detention Pond	No Herbicides
11/5	0	60	262.5	60	0.4	0.4					R	C, L, & S	Detention Pond	No Herbicides
11/5	60	190	262.5	130	0.8		0.8					C, L, & S		Stump Treat
11/5	190	775	262.5	585	3.5	3.5					RT&E	C, L, & S	Green River	No Herbicides
11/6	0	190	262.5	190	1.1	1.1					RT&E	C, L, & S	Green River	No Herbicides
11/6	190	1000	262.5	810	4.9		4.9					C, L, & S		Stump Treat
11/6	1000	1777	262.5	777	4.7		4.7				SS	C, L, & S		Stump Treat
12/1	0	210	262.5	210	1.3		1.3				SS	C, L, & S		Stump Treat
12/1	210	630	262.5	420	2.5	2.5					R/SS	C, L, & S	Creek	No Herbicides
12/1	630	1128	262.5	498	3.0		3.0				SS	C, L, & S		Stump Treat
12/2	0	400	262.5	400	2.4		2.4				SS	C, L, & S		Stump Treat
12/2	400	757	262.5	357	2.2		2.2					C, L, & S		Stump Treat
12/3	0	717	262.5	717	4.3		4.3					C, L, & S		Stump Treat
12/4	0	1000	262.5	1000	6.0		6.0					C, L, & S		Stump Treat
12/5	0	1309	262.5	1309	7.9		7.9					C, L, & S		Stump Treat
13/1	0	940	262.5	940	5.7		5.7					C, L, & S		Stump Treat
13/1	940	1155	262.5	215	1.3	1.3					R	C, L, & S	Pump Ho	No Herbicides
13/1	1155	1346	262.5	191	1.2		1.2					C, L, & S		Stump Treat
13/2	0	1169	262.5	1169	7.0		7.0					C, L, & S		Stump Treat
13/3	0	30	262.5	30	0.2		0.2					C, L, & S		Stump Treat
TOTAL	FOR	PAGE	1 to 7		395.3	27.6	348.7	0.0	0.0	0				

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)
TOTAL					**395.3**	**27.6**	**348.7**	**0.0**	**0.0**	**0**		
13/3	30	370	262.5	340	2.0		Skip				Skip	Skip - T&B Agreement
13/3	370	1000	262.5	630	3.8		3.8					C, L, & S Stump Treat
13/3	1000	1126	262.5	126	0.8		Skip				Skip	Skip - T&B Agreement
13/4	0	190	262.5	190	1.1		Skip				Skip	Skip - T&B Agreement
13/4	190	220	262.5	30	0.2		0.2					C, L, & S Stump Treat
13/4	220	310	262.5	90	0.5		Skip				Skip	Skip - T&B Agreement
13/4	310	711	262.5	401	2.4		2.4					C, L, & S Stump Treat
13/5	0	810	262.5	810	4.9		5.1					C, L, & S Stump Treat
13/5	810	845	262.5	35	0.2	0.2					R	C, L, & S Well No Herbicides
14/1	0	110	262.5	110	0.7	0.7					R	C, L, & S Well No Herbicides
14/1	110	240	262.5	130	0.8		0.8					C, L, & S Stump Treat
14/1	240	260	262.5	20	0.1	0.1					R	C, L, & S Well No Herbicides
14/1	260	400	262.5	140	0.8	0.8					R/SS	C, L, & S Well No Herbicides
14/1	400	490	262.5	90	0.5		0.5				SS	C, L, & S Stump Treat
14/1	490	520	262.5	30	0.2	0.2					R/SS	C, L, & S Well No Herbicides
14/1	520	670	262.5	150	0.9	0.9					R	C, L, & S Well No Herbicides
14/1	670	1281	262.5	611	3.7		3.7					C, L, & S Stump Treat
14/2	0	1271	262.5	1271	7.7		7.7					C, L, & S Stump Treat
14/3	0	40	262.5	40	0.2		0.2					C, L, & S Stump Treat
14/3	40	420	262.5	380	2.3	2.3					R	C, L, & S Wetland No Herbicides
TOTAL	**FOR**	**PAGE**	**1 to 8**		**429.2**	**32.8**	**373.1**	**0.0**	**0.0**	**0**		

NOTES:

LOCATION			(1)	(2)	(3)	C, L & S	C & S	C & C	MACH.	NO.	Resources	CONTROL PRESCRIPTION		
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	ACRES	ACRES	ACRES	ACRES	HOURS		(REMARKS)		
TOTAL					**429.2**	**32.8**	**373.1**	**0.0**	**0.0**	**0**				
14/3	420	1003	262.5	583	3.5		3.5					C, L, & S		Stump Treat
14/4	0	1120	262.5	1120	6.7		6.7					C, L, & S		Stump Treat
14/5	0	657	262.5	657	4.0		4.0					C, L, & S		Stump Treat
15/1	0	370	262.5	370	2.2		2.2					C, L, & S		Stump Treat
15/1	370	520	262.5	150	0.9		0.9				SS	C, L, & S		Stump Treat
15/1	520	900	262.5	380	2.3		2.3					C, L, & S		Stump Treat
15/1	900	1070	262.5	170	1.0	1.0					R	C, L, & S	Well & Pump Ho	No Herbicides
15/1	1070	1440	262.5	370	2.2		2.2					C, L, & S		Stump Treat
15/1	1440	1468	262.5	28	0.2	0.2					RT&E	C, L, & S	Creek & Wetland	No Herbicides
15/2	0	1460	262.5	1460	8.8	8.8					RT&E	C, L, & S	Creek & Wetland	No Herbicides
15/2	1460	1540	262.5	80	0.5	0.5					RT&E/SS	C, L, & S	Creek & Wetland	No Herbicides
15/2	1540	1675	262.5	135	0.8		0.8				SS	C, L, & S		Stump Treat
15/3	0	850	262.5	850	5.1		5.1					C, L, & S		Stump Treat
15/4	0	892	262.5	892	5.4		5.4					C, L, & S		Stump Treat
15/5	0	520	262.5	520	3.1		3.1					C, L, & S		Stump Treat
15/6	0	821	262.5	821	4.9		4.9					C, L, & S		Stump Treat
				0	0.0							**END OF PROJECT**		
				0	0.0									
				0	0.0									
				0	0.0									
TOTAL	**FOR**	**PAGE**	**1 to 9**		**481.0**	**43.3**	**414.2**	**0.0**	**0.0**	**0**				

NOTES:

INSPECTOR'S DAILY RECORD
MACHINE & HAND CUTTING - HOURLY

CONTRACTOR: Franklin Contracting

RELEASE NO.: 9529 - 029

LINE NAME: Tacoma - Covington No. 3

Contractor's Signature:	Date:
Inspector's Signature:	Date:

TASK ORDER SUMMARY

RT E	ENDING DATE	TOTAL CHIPPER HRS	MACHINE HRS		MAN HOURS			TOTAL TREES CUT
			HRS. WORKED	EST. ACS.	HRS. WORKED	NO. MEN	TOTAL EST. ACS.	
9/30/03	10/04/03	20					187.3	45

Hourly chipper man hours = 66 hrs. Ranger sprayer = 5 hrs. Backpack sprayer = 18 hrs.

DAILY RECORD:

E	STR FROM	STR TO	CHIPPER HRS.	MACHINE HRS HRS.	MACHINE HRS EST. ACS.	MAN HOURS HOURS	MAN HOURS NO. MEN	MAN HOURS EST. ACS.	TREES CUT	COMMENTS:	INSPEC'S INITALS	CONT'S INITALS
9/30/03	Sub	1/1		4		8/4	4	10		Add on acres from sub to 1/1		
9/30/03	1/1	1/3		6		32/8	4	10.7				
10/01/03	1/3	2/1		10		40/10	4	23				
10/02/03	2/1	2/5		10		40/10	4	23.6				
10/06/03	2/5	3/4		20		100/10	10	26.2				
10/06/03	2/1	2/2	8			30/6	5		12	Cut & chip willows & other trees		
10/06/03			2			6/2	3		8	Cut & chipped 4 firs & 4 Alders		
AL Page 1												

INSPECTOR'S DAILY RECORD
MACHINE & HAND CUTTING - HOURLY

CONTRACTOR: Franklin Contracting

RELEASE NO.: 9529 - 029

LINE NAME: Tacoma - Covington No. 3

DAILY RECORD:

TE	STR FROM	STR TO	CHIPPER HRS.	MACHINE HOURS HRS.	MACHINE HOURS EST ACS.	MACHINE HOURS HOURS	MAN HOURS NO. MEN	MAN HOURS EST. ACS.	TREES CUT	COMMENTS:	INSPEC'S INITALS	T'S INITALS
10/07/03	3/4	4/4		20			12e/10	29.5				
10/08/03	4/4	5/5		20			120/10	38.7				
10/09/03	5/5	6/5		20			120/10	25.6				
10/08/03			3	20			9/3		15			
10/09/03	4/3	5/1	7	14			21/7	(5)	10			
TOTAL Page (____)												
AL (all pages)												

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(01-99)

ADNO

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
RIGHT-OF-WAY DATA-FIELD REPORT

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by CIL – 01/11/1

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ROW Tacoma - Covington APPLICATOR Franklin Contracting Inc YR 2003 MO Oct 10 DAY 01

E	IDEN MIL	IDEN SR	IDEN +FROM DIST	LENGTH	MD	HERBICIDE APPLICATION CHEM1	% MIX	CHEM2	% MIX	D	AMOUNT	WIDTH	ACRES	SPECIES	M
1															
2	Sub	to	3/2			GA	3%	Method	1%	W	200 gal.	25		OW, Hm, BB	
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															

E	MIL	SR	+FROM DIST

COMMENTS:
Sprayed roads & towers from sub to 3/2.

E	WEATHER LOG TIME	WIND SPD	WIND DIR	TEMP	HUM	C
2	10:00 10/6	1	E	70	60	C

CREW PERSONNEL: 3 - men 5 hrs.
Ronald R Fish Jr.

BATCH LOG MTL	AMOUNT	U

EQUIPMENT: Ranger Sprayer

FILE CODE: MA-1
RETENTION: TFN/TFX = S + 3 YRS; OTHERS

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RIGHT-OF-WAY DATA-FIELD REPORT

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ROW Tacoma - Covington #3 APPLICATOR Franklin Contracting Inc. YR 03 MO 10 DAY 06

E	IDEN MIL	IDEN SR	IDEN +FROM DIST	LENGTH	MD	HERBICIDE APPLICATION CHEM1	% MIX	CHEM2	% MIX	D	AMOUNT	WIDTH	ACRES	SPECIES	M
1											6 gal mix				
2	1	5	0	1649	MS	GA	25%			OL		262-5	9.9	OW, HM, M	
3	2	1	0	560									3.4		
4	2	2	0	1275									7.7		
5	2	3	0	1025									6.2		
6	2	4	0	1050									6.3		
7															
8															
9															
10															
11															
12															
13															
14															
15															

E	MIL	SR	+FROM DIST

COMMENTS:

B Stumps treated - Cut stumps

Acres = 33.5 6 gal: mix

WEATHER LOG E	TIME	WIND SPD	WIND DIR	TEMP	HUM	C
2	10:00	1	E	70	60	C

CREW PERSONNEL

1-man 5 hrs.

Held a fill

BATCH LOG MTL	AMOUNT	U

EQUIPMENT

Backpack

FILE CODE: MA-12
RETENTION: TFN/TFX = S + 3 YRS; OTHERS

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ROW Tacoma – Covington #3 APPLICATOR Franklin Contracting Inc. YR 03 MO 10 DAY 07

E	IDEN MIL	IDEN SR	IDEN +FROM DIST	LENGTH	MD	HERBICIDE APPLICATION CHEM1	% MIX	CHEM2	% MIX	D	AMOUNT	WIDTH	ACRES	SPECIES	M
1											8 gal mix				
2	3	4	0	894	MS	GA	25%			02	"	262-5	5.3	OW, Hm, m	
3	3	5	0	996	"	"	"			"	"	"	6.0	"	
4	4	1	0	875	"	"	"			"	"	"	5.3	"	
5	4	2	0	954	"	"	"			"	"	"	5.7	"	
6	4	3	0	1196	"	"	"			"	"	"	7.2	"	
7															
8															
9															
10															
11															
12															
13															
14															
15															

E	MIL	SR	+FROM DIST

COMMENTS:

Stump treated

Mix = 8 gal. Acres = 29.5

WEATHER LOG E	TIME	WIND SPD	WIND DIR	TEMP	HUM	C
4	1100	1	E	70	60	B

CREW PERSONNEL

1 - man

10 hrs

Gold R Fllr.

BATCH LOG MTL	AMOUNT	U

EQUIPMENT

Backpack

FILE CODE: MA-12
RETENTION: TFN/TFX = S + 3 YRS; OTHERS

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(01-99)

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BONNEVILLE POWER ADMINISTRATION
RIGHT-OF-WAY DATA-FIELD REPORT

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ROW Tacoma - Covington APPLICATOR Franklin Contracting Inc. YR 03 MO 10 DAY 08

E	IDEN MIL	IDEN SR	IDEN +FROM DIST	LENGTH	MD	HERBICIDE APPLICATION CHEM1	% MIX	CHEM2	% MIX	D	AMOUNT	WIDTH	ACRES	SPECIES	M
1															
2	4	4	0	1025	ms	GA	25%			02		2625	6.2		
3	4	5	0	1201									7.3		
4	5	1	0	1200									6.6		
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															

E	MIL	SR	+FROM DIST

COMMENTS:

Stump treated - started to rain intermittently.

mix 2 Acres = 20.1

E	WEATHER LOG TIME	WIND SPD	WIND DIR	TEMP	HUM	C
3	1200	2	E	60	90	L

CREW PERSONNEL

1 - man

3 hrs.

Gale R Fallert

BATCH LOG MTL	AMOUNT	U

EQUIPMENT

FILE CODE: MA-12
RETENTION: TFN/TFX = S + 3 YRS; OTHERS

INSPECTOR'S DAILY RECORD
MACHINE & HAND CUTTING - HOURLY

CONTRACTOR: Franklin Contracting Inc.
TASK ORDER NO.: 9529-029
LINE NAME: Tacoma - Covington # 3

TASK ORDER SUMMARY								
START DATE	ENDING DATE	TOTAL CHIPPER HRS	MACHINE HRS		MAN HOURS			TOTAL TREES CUT
			HRS. WORKED	EST. ACS.	HRS. WORKED	NO. MEN	TOTAL EST. ACS.	
10/13/03	10/23/03	21	120	33.1	480	6	162.2	

Contractor's Signature:

Inspector's Signature:

Backpack sprayer = 4 hrs.

DAILY RECORD:

DATE	STR		CHIPPER HRS.	MACHINE HRS		MAN HOURS			TREES CUT	COMMENTS:	INSPEC'S INITALS
	FROM	TO		HRS.	EST. ACS.	HOURS	NO. MEN	EST. ACS.			
10/13/03	10/1	10/4		20/10		60/10	6	17.1			
10/14/03	10/4	11/4		20/10	6	60/10	6	20			
10/15/03	11/4	12/2		20/10	6	60/10	6	22.6			
10/16/03	12/2	13/2	8	20/10	6	60/10	6	25			
10/20/03	13/2	14/1	4	10	3.1	60/10	6	20			
10/21/03	14/1	14/5	4	10	4	60/10	6	24.1			
10/22/03	14/5	15/2	5	10	Ø	60/10	6	12.8			
TOTAL Page 1					25.1			141.6			

INSPECTOR'S DAILY RECORD

MACHINE & HAND CUTTING - HOURLY

CONTRACTOR: Franklin Contracting Inc.

TASK ORDER NO.: 9529-029

LINE NAME: Tacoma - Covington #3

DAILY RECORD:											
DATE	STR		MACHINE HOURS		MAN HOURS			TREES CUT	COMMENTS:	INSPEC'S INITALS	CONT'S INITALS
	FROM	TO	HRS.	EST ACS.	HOURS	NO. MEN	EST. ACS.				
10/23/03	15/2	546	10	8	60/10	6	20.6				
SUB TOTAL Page (1)				25.1			141.6				
TOTAL (all pages)				33.7			162.2				

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(01-99)

ADNO

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
RIGHT-OF-WAY DATA-FIELD REPORT

Electronic Form Appr
by CIL – 01/11/1

PAGE _____ OF _____

ROW Tacoma-Covington #3 APPLICATOR Franklin Contractors Inc. YR 03 MO 10 DAY 22-23

E	IDEN MIL	IDEN SR	IDEN +FROM DIST	LENGTH	MD	HERBICIDE APPLICATION CHEM1	% MIX	CHEM2	% MIX	D	AMOUNT	WIDTH	ACRES	SPECIES	M
1															
2	~~14~~														
3	14	4	0	1120	AL	GA	25%			D	.5 gal/mix	262.5	6.7	OW, HM, BB	
4															
5	14	5	0	657	AL	GA					.5 gal/mix	262.5	4		
6															
7	15	1	0	1000	AL	GA					1.0 gal/mix	262.5	6		
8															
9															
10															
11															
12															
13															
14															
15															

E	MIL	SR	+FROM DIST

COMMENTS:

Stump treated on 10/22/03 - after rain stopped. Stumped treated @ 15/1 AI.L to paved rd.

Mix = 2.0 gal. Acres = 16.7

WEATHER LOG

E	TIME	WIND SPD	WIND DIR	TEMP	HUM	C
3	11:00 /10/22/03	1-2	N	60	75	B
5/7	10:00 /10/22/03	2	E	58	70	B

CREW PERSONNEL

1 - man
10-22-03 = 2 hrs.
10-23-03 = 2 hrs.
Total = 4 hrs.

Ted R Zell

BATCH LOG

MTL	AMOUNT	U

EQUIPMENT

Backpack

FILE CODE: MA-1
RETENTION: TFN/TFX = S + 3 YRS; OTHERS

SCOPE OF WORK
FOR
VEGETATION CONTROL
ON
BONNEVILLE POWER ADMINISTRATION
TRANSMISSION LINE
RIGHTS-OF-WAY

PART A - GENERAL

A.1 OBJECTIVE

The purpose of this contract is to obtain services for the control of vegetation on and around Bonneville Power Administration (BPA) facilities in designated areas. These areas are now or will be incompatible with transmission line operation and maintenance. All work ***shall*** be completed by methods, which protect the electrical facilities, environment, and property of the adjacent landowners.

A.2 Glossary of terms:

Tall Growing Vegetation - Any species of vegetation at a specific site that can grow within 25 feet of any conductor.
Low Growing Vegetation – Any species of vegetation at a specific site that can not grow within 25 feet of any conductor.

A.3 GENERAL REQUIREMENTS

The following general requirements pertain to the contract as a whole.

1. The Contractor's right to proceed is subject to approval by the COTR. This decision will be based on the Contractor's ability to complete the work in accordance with the technical specification without causing environmental damage.
2. Vegetation prescriptions and designated work areas ***shall*** be followed as identified in each Release. The COTR ***shall*** approve any deviation from the vegetation prescription or designated work area.
3. The Contractor ***shall*** be responsible for measuring all boundaries specified in each Release. The Contractor ***shall*** remove all flagging used to locate project area boundaries, prior to final payment. The Contractor ***shall*** be responsible for any damage or contamination to property in or out of the designated work area.
4. The Contractor ***shall*** self-inspect completed work and maintain daily accomplishment records on a form acceptable to the COTR. The minimum information to be recorded for non-herbicide applications includes: control method, acres controlled, and date. The information to be recorded for herbicide applications include completing the Right-of-Way Data Field Report (BPA 6530.10e). The Contractor ***shall*** retain a copy and provide this information to BPA for contract compliance reviews and billing purposes.

PART B - TECHNICAL

B.1 VEGETATION TO BE CONTROLLED

The Contractor ***shall*** control all tall growing and low growing species of vegetation in designated work areas as specified in each vegetation prescription or release.
A Qualified Line Clearance Tree Trimmer may be required to control tall growing vegetation "on" and "off" the Transmission Line Right-of-Way (ROW). This is dependent on the height of the vegetation and distance from the conductor as defined in the Code of Federal Regulations 29, 1999, (29 CFR 1910.269).

B.2 AREAS TO BE TREATED

Designated work areas to be treated include the following BPA facilities: Transmission line right-of-way (ROW), Structures, and Access Roads.
Through the use of hand cutting, machine cutting, and/or herbicide methods, the Contractor ***shall*** cut or spray all vegetation except grasses, as specified in the vegetation prescription. The following are distinct requirements for each area to be treated:

1. Transmission line right-of-way - The extent of clearing to be performed along the ROW is defined here and in the vegetation prescription. Clearing limits will include the entire corridor. Within the defined work area of the ROW, the Contractor ***shall*** perform the following:

   A. Cut all tall growing vegetation to the specified ROW width as identified in the vegetation prescription, regardless of the width previously cut.

   B. Cut and/or treat all tall growing vegetation greater than 30 centimeters (cm) (1 foot) in height.

   C. Cut and/or treat all low growing vegetation specified in the vegetation prescription.

   D. Measure all tall growing vegetation approaching the conductor to determine the top distance from the conductor. Tops or limbs breaching Safety Zone B require a qualified line clearance tree trimmer. Tops or limbs breaching Safety Zone A, the Minimum Approach Distance (MAD), require an outage (clearance). Safety Zones are discussed in the Safety Requirements portion of this contract.

   E. Cut stems flat and in a manner such that stump heights do not exceed 10.16 cm (4 inches) from the ground.

   F. Cut all conifers below the lowest live branch, even if the branch is below the 10.16 cm (4 inch) height.

   G. Gates – Cut and remove all tall growing vegetation and low growing vegetation identified in the vegetation prescription from the gate, the gate swing area and both gate posts.

   In addition to the above requirements:

   H. Directional falling may be required to ensure that tall growing vegetation; does not endanger personnel, operation of the transmission line(s); does not fall into streams, wetlands, or other bodies of water.

   I. Trees located "off" of the ROW whose limbs encroach toward the line may be side-limbed.

2. Structure Sites -. The extent of clearing to be performed around structure sites is defined here and in the vegetation prescription. The Contractor ***shall*** perform the following:

   A. Control all vegetation except grass within a 9.15-meter (30 feet) radius of all wood poles and all steel tower legs.

   B. Cut all vegetation except grass from around the guy wires even if they are outside the prescribed 30-foot control area.

   C. Cut all stems ***flat*** and in a manner such that stump heights ***do not*** exceed 5.08 cm (2 inches).

   E. Remove all cut vegetation from the structure site clearing area and in accordance with the specifications identified in Section B4.

3. Access Roads - The extent of clearing to be performed along access roads is defined here and in the vegetation prescription. Access roads "on" ROW easement that require clearing will be considered part of the ROW acres. Roads "off" the ROW will be measured and converted to acres. The access roads located outside the ROW will either be identified with colored flagging, wood laths, or by the COTR. Drawings will be provided to the Contractor, which depict the approximate locations of the work to be performed. However, the drawings are advisory only. The Contractor ***shall*** perform the following:

   A. Cut the entire driving surface, and cut 5 feet beyond each edge of the driving surface, along cut-slopes and fill-slopes.

   B. Cut all vegetation, except grasses, in a manner such that the stems or stumps are **flat**, and do ***not*** exceed 5.08 cm (2 inches) in height.

   C. Cut Encroaching or overhanging limbs to provide a cleared area of 4.57 meters (15 feet) above the roadway. Trim limbs flush to the trunk. Dispose of cut debris outside of the cleared area and off of the driving surface of the road.

B.3 TREATMENT METHODS

In performing vegetation control activities, three methods of treatment may be used: Hand Cutting, Machine Cutting, and Herbicide (chemical applications). Each designated work area may involve a combination of any or all of the treatment methods. The methods to be used will be specified in each Release.

1. *Hand cutting methods* involve the use of power and non-power hand tools in accomplishing vegetation control activities.

2. *Machine cutting method*s involve the use of mechanized equipment in accomplishing vegetation control activities. All equipment must be approved by BPA prior to its use on BPA rights-of-way.

3. *Herbicide methods* involve a chemical application of approved herbicides in accomplishing vegetation control activities, in combination or in lieu of other methods. The vegetation prescription may identify "no spray" zones within the designated work area. ***Do not*** use herbicides in designated "no spray" zones.

B.4 BRUSH DISPOSAL METHODS

Hand cutting and Machine cutting methods of vegetation control result in considerable amounts of debris. The Contractor ***shall*** "Cut, Lop and Scatter", "Stack", "Chip", or "Mulch" all debris and dispose of it on the ROW as indicated in each Release. The Contractor is expressly prohibited from burning any material on BPA transmission line right-of-way.

All debris from brush disposal methods ***shall not*** be disposed of, or otherwise allowed, to enter any body of water, including creeks, streams, stream beds, drainage ways, or ditches along the roads.

The Contractor ***shall*** remove all debris, created by vegetation control activities, described in this release, from: all road surfaces (on and off the ROW), within the clearing limits of structures, and around structure guy-lines.

When noted in the vegetation prescription trees of merchantable size ***shall*** be limbed only and left whole.

1. **Cut, Lop and Scatter** - Is a process of removing limbs from stems and bucking stems in a manner to allow them to lay on the ground and decay.

   A. All tree branches ***shall*** be cut from the entire stem to allow the stem to lie flat on the ground. All tree stems ***shall*** be cut equal to or less than 3.05 meters (10 feet) in length.

   B. Debris ***shall*** not exceed a 45.72 cm (18 inch) depth. Where stems and branches form a concentration of fuel that exceeds 45.72 cm (18 inches) above the ground line, they ***shall*** be scattered to maximize ground contract and minimize fire hazard.

2. **Stack**

   A. Stems and branches ***shall*** be stacked on the transmission line right-of-way.

   B. Tree branches ***shall*** be cut from entire stem to allow the stem to lie flat on the ground and in the stack. All stem and branches ***shall*** be cut to3.05 meters (10 feet) or less in length.

   C. All stacks ***shall*** be less than 4.57 meters (15 feet) in diameter and 1.83 meters (6 feet) in height.

   D. All stems and branches ***shall*** be stacked in the same direction.

3. **Chipping**

   1. The Contractor ***shall*** chip all portions of the stem and branches, which are less than or equal to 15.24 cm (6 inches) in diameter created by this project.

   2. All stems and branches ***shall*** be chipped within ten (10) working days after cutting or before leaving the designated area.

   3. Dimensions of the chipped debris ***shall*** be equal to or less than 7.62 cm (6 inches) in length and 7.62 cm (6 inches) in width.

   4. Stems that are too large to be handled by the chipper ***shall*** be limbed and then chipped.

   5. Chips ***shall*** be either disposed of at sites designated by COTR or scattered on the right-of-way. If scattered on the right-of-way, the piles ***shall*** be equal to or less than 42.25 cm (18 inches) in depth.

6. The Contractor ***shall*** use one of the following options to remove debris from access roads that are not on the transmission line right-of-way. Either option ***shall*** have prior approval by the COTR.

    a. Remove the debris from the access road and chip it at a designated disposal area.

    b. Chip the debris on site into a bin truck and then dump the chips at a designated disposal area.

4. **Mulching**

    1. The Contractor ***shall*** mulch all portions of the stem and branches, which are equal to or less than 15.24 cm (6 inches) in diameter.

    2. All debris from mulching ***shall*** be equal to or less than 60.69 cm (6 inches) in length and 15.24 cm (3 inches) in width.

    3. Stems that are too large to be handled by the hydraulic powered brush cutter ***shall*** be lopped and scattered.

    4. All debris ***shall*** be scattered on the transmission line right-of-way in a manner not to exceed 42.25 cm (18 inches) in depth.

B.5 HERBICIDES

When herbicides are used the Contractor ***shall*** take all precautions necessary to protect persons and property against injury or damage and ***shall*** be responsible for any such injury or damage that occurs as a result of such fault or negligence.
The Contractor ***shall*** be licensed in the state where the work is located. The Contractor's Representative ***shall*** have their current state herbicide license available for inspection.
Only herbicides with approved active ingredients identified in the Environmental Standards & Procedures (ESP# E-VM-004; March 7, 2001) ***shall*** be used.
The Contractor ***shall*** follow product label directions during all phases of herbicide treatment (e.g., transport, handling, storage, mixing, and application).
All unused herbicides, provided as government furnished property, ***shall*** be returned to BPA at the conclusion of this contract. Herbicides ***shall*** be returned in their original undamaged containers.
The Contractor's Representative ***shall*** complete a Right-of-Way Data Field Report on the days herbicides are used. The Contractor's Representative ***shall*** retain a copy of the report for billing purposes.

1. **Target Vegetation**:

    The target vegetation to be treated with herbicides is all tall growing species. Specific species or species groups will be identified in the vegetation prescription.

2. **Herbicide Control Methods:**

    The Contractor ***shall*** use control methods identified in the vegetation prescription to treat target vegetation. These include Low Volume, Basal Bark, and Cut Stump methods.

3. **Mixing Approved Herbicides:**

   A. The Contractor shall only use the herbicide mixtures and adjuvants listed on BPA's List of Approved herbicides.

   B. The Contractor ***shall*** add coloring dye to all herbicide mixes.

   C. Buffer zones to protect water resources shall be used when mixing and loading herbicides. The buffer zones are shown on Table 2 of this document.

4. **Application of Approved Herbicides:**

   A. Herbicide application ***shall*** be made on target vegetation less than 6 feet tall. Target vegetation greater than 6 feet tall ***shall*** be cut in accordance with B.2 before herbicides are applied.

   B. The Contractor ***shall*** provide a competent person, who is licensed as a herbicide applicator, to supervise the application of all herbicides.

   C. No herbicide ***shall*** be applied to any body of water.

   D. The Contractor ***shall*** make every attempt to locate all sources of domestic water supplies. Water supplies contaminated by the Contractor's activities ***shall*** be decontaminated at the Contractor's expense, to the state or county specifications.

   E. The Contractor ***shall*** apply herbicide in accordance with standard industry practices (i.e. in a prudent and conscientious fashion, in accordance with normal safe practices).

   F. Weather may affect the application of herbicides. When NOT otherwise indicated by herbicide label requirements or instructions, the Contractor ***shall*** abide by the weather restrictions listed in table 1, before applying herbicides:

      1. Applications should **not** be made when rain is imminent (within 2 hours).
      2. Applications shall not be made to frozen or snow-covered ground regardless of ambient air temperature.
      3. When making applications to stumps or trunks, they must not be frozen.
      4. Weather Restrictions for Herbicide Applications: 3/

Table 1: Weather Restrictions.

Control Method	Max. Temp.	Minimum Humidity	Precipitation	Wind	Season
Foliar	75°	30%	None	0-5 MPH	Spring/Summer 2/
Stump	-	-	Minimal	-	Frost free 1/
Basal	75°	30%	Minimal	0-10 MPH	Frost free 1/

1/ Wood must not be frozen to permit penetration.
2/ Or as specified on herbicide label.
3/ Some local, State, or Label restrictions may require stricter requirements.

5. **Storage and Handling:**

When herbicides are government-furnished property, the Contractor ***shall*** make arrangements with BPA for delivery.

The Contractor is responsible for handling, storing, and safely transporting all herbicides used in conjunction with this contract. The Contractor shall store and handle all herbicides in accordance with the storage and handling requirements of the State in which the herbicides are to be stored. Where no State rules apply, the Contractor, at a minimum will store mixed and unmixed herbicides in a locked building, shelter, or substantial enclosure, bin etc, where they may not be removed by unauthorized persons or damaged. Herbicide mixture stored in Contractor's equipment ***shall*** be adequately protected against theft, unauthorized use, or spillage.

6. **Buffer Strips:**

The Contractor ***shall*** observe the minimum buffer strip requirements listed in table 2, during herbicide applications:

Table 2: Buffer Strips (DOE/EIS-0285)

Herbicide & Adjuvant	Buffer width from habitat Source per Application Method (i.e., stream, wetland, or sensitive habitat)				
Ecological Toxicities and Characteristics	Spot	Localized	Broadcast[1]	Aerial [2]	Mixing, Loading, Cleaning
Practically Non-Toxic to Slightly Toxic	Up to Edge [3,4]	Up to Edge [3,4]	10.7m [3,4] (35 ft.)	30.5m [4] (100 ft.)	30.5m [5] (100 ft.)
Moderately Toxic, or if Label Advisory for Ground/ Surface Water	7.6m [3,4] (25 ft.)	10.7m [3,4] (35 ft.)	30.5m [3,4] (100 ft.)	76.2m [4] (250 ft.)	76.2m [5] (250 ft.)
Highly Toxic to Very Highly Toxic	10.7 m [3,4] (35 ft.)	30.5m [3,4] (100 ft.)	Noxious weed control only. Buffer as per local ordinance	Noxious weed control only. Buffer as per local ordinance	76.2m [5] (250 ft.)

1 Using ultra low volume (ULV) nozzles with orifice size and spray pressure set to produce droplets at a minimum of 150 microns, boom or nozzle heights at the lowest possible height, and cross-wind speed of less than 10 mph.3

2 Using ULV nozzles with orifice size and spray pressure set to produce droplets at a minimum of 150 microns, minimizing air shear relative to nozzle angle and aircraft speed, boom length at 70% or less of wingspan/rotor, swath adjustment not to exceed 60 feet based on maximum cross-wind speed of less than 10 mph, minimum safety clearance application height, and herbicide tank mixture dynamic surface tension is less than 50 dynes/cm.3

3 Goodrich-Mahoney, J.W., Determination of the Effectiveness of Herbicide Buffer Zones in Protecting Water Quality, Electric Power Research Institute, Report No. TR-113160, September 1999

4 Calculated from: A Summary of Ground Application Studies, Spray Drift Task Force, 1997

5 BPA Best Management Practice

7. **Cleanup and Disposal**

The contractor shall clean all empty herbicide containers used on the job in accordance with State Regulations and dispose of them in accordance with state law. The Contractor shall comply with the buffer zones set forth in Table 2 when cleaning equipment. Empty containers ***shall*** not be burned prior to disposal. Under no circumstances will the Contractor leave used or unused containers, or, discharge reinserts on BPA property.

B.6 Standards of Acceptance for Payment

At the completion of work, or at agreed upon intervals, the Contractor *shall* submit all daily field accomplishment and herbicide application reports to the COTR. The COTR or designated representative will determine the quality of work for payment or re-treatment. The Contractor shall be paid up to 100% of the price of the contract if the Contractor achieves the following level of control of target species. The Contractor is expected to re-treat the area until the control level is obtained.

Tree height class (ft.)	% Controlled
0-5	90%
5-10	95%
10 +	100%

SCOPE OF WORK

Franklin Contracting
Contract No. 9529, Release No. 029
Covington District
Tacoma – covington 230kv, corridor, hand and machine cut with herbicide application.

The contractor shall provide the labor, material equipment supplies and services necessary to hand and machine cut, and apply herbicides along access roads and around strucrure sites on the Tacoma – covington 230kv, corridor, form the 1 to the 15 mile. All work will be in accordance with the Statement of Work in the Master Agreement and the Vegetation Control Prescription for the project. The contractor will need to refer to the Plan and Profile and cut Sheet for the location of work to be completed. Chemicals are provided by BPA.

The following is an estimate of equipment and labor hours are needed:

Hand & Machine cut	457.5 ac,	$167.00/ac	$76,402.50
Apply Herbicides	40.0 hrs.	$135.00/hr	$ 8,100.00
Total			**$81,802.50**

The Increase in funding for this project is to include the additional acres added to the project, and the cutting and chipping of Danger Trees and C-Trees as Identified by the COTR.

Hand & Machine cut	39.5 ac,	$167.00/ac.	$ 6,596.50
Brushcutter	90.0 hrs.	$ 33.25/hr.	$ 2,992.50
Chipper	47.0 hrs.	$ 25.00/hr.	$ 1,175.00
Total			**$ 10,764.00**
GRAND TOTAL			**$ 92,566.50**

FOIA Request #05-049

Request Item #3:

Inspections Covering Tacoma-Raver #1 and #2 500 kV Line between Structures 15/1 and 15/2.

- Transmission Line Maintenance Working Patrol; April 1999 through July 2005.
- Helicopter Patrol: January 1995 through July 2005.

Bonneville Power Administration

Working Patrol Report

Adno	Mile	Str. No	Type	Inspection Date	GPS Long.	GPS Lat.	Comment	Inspection Crew
8246	014	05	ST	02/12/2003			GTE PCS SITE	DUSTY MASLONKA MIKE STOLFUS RANDY BORJESSON
8246	014	05	ST	01/10/2002			GTE PCS SITE	CHUCK LANGERFELD TONY WOHLSEIN
8246	014	05	ST	12/20/2000			GTE PCS SITE	CHUCK LANGERFELD LOREN CUMMINGS THADD FAUSSETT
8246	014	05	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT
8246	014	05	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	015	01	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	015	01	ST	03/04/2004				RANDY BORJESSON THADD FAUSSETT
8246	015	01	ST	04/08/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	01	ST	02/12/2003				DUSTY MASLONKA MIKE STOLFUS RANDY BORJESSON
8246	015	01	ST	01/10/2002				CHUCK LANGERFELD TONY WOHLSEIN
8246	015	01	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT
8246	015	01	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	015	02	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	015	02	ST	03/04/2004				RANDY BORJESSON THADD FAUSSETT
8246	015	02	ST	04/08/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	02	ST	01/10/2002				CHUCK LANGERFELD TONY WOHLSEIN
8246	015	02	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT
8246	015	02	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	015	03	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	015	03	ST	03/04/2004				RANDY BORJESSON THADD FAUSSETT
8246	015	03	ST	04/08/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	03	ST	01/10/2002				CHUCK LANGERFELD TONY WOHLSEIN
8246	015	03	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT

Bonneville Power Administration

Working Patrol Report

Adno	Mile	Str. No	Type	Inspection Date	GPS Long.	GPS Lat.	Comment	Inspection Crew
8246	015	03	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	015	04	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	015	04	ST	03/04/2004				RANDY BORJESSON THADD FAUSSETT
8246	015	04	ST	04/24/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	04	ST	04/08/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	04	ST	06/13/2002				BRIAN BROWER THADD FAUSSETT
8246	015	04	ST	01/10/2002				CHUCK LANGERFELD TONY WOHLSEIN
8246	015	04	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT
8246	015	04	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	015	05	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	015	05	ST	03/05/2004				MIKE NIXON THADD FAUSSETT
8246	015	05	ST	03/04/2004				RANDY BORJESSON THADD FAUSSETT
8246	015	05	ST	04/08/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	05	ST	06/13/2002				BRIAN BROWER THADD FAUSSETT
8246	015	05	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT
8246	015	05	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	015	06	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	015	06	ST	03/05/2004				MIKE NIXON THADD FAUSSETT
8246	015	06	ST	04/09/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	06	ST	04/08/2003				DUSTY MASLONKA THADD FAUSSETT
8246	015	06	ST	06/13/2002				BRIAN BROWER THADD FAUSSETT
8246	015	06	ST	12/12/2000				RANDY BORGESSON THADD FAUSSETT
8246	015	06	ST	04/05/1999				JERALD NIELSEN THADD FAUSSETT
8246	016	01	ST	07/22/2005				JIM BROWN THADD FAUSSETT
8246	016	01	ST	03/05/2004				MIKE NIXON THADD FAUSSETT

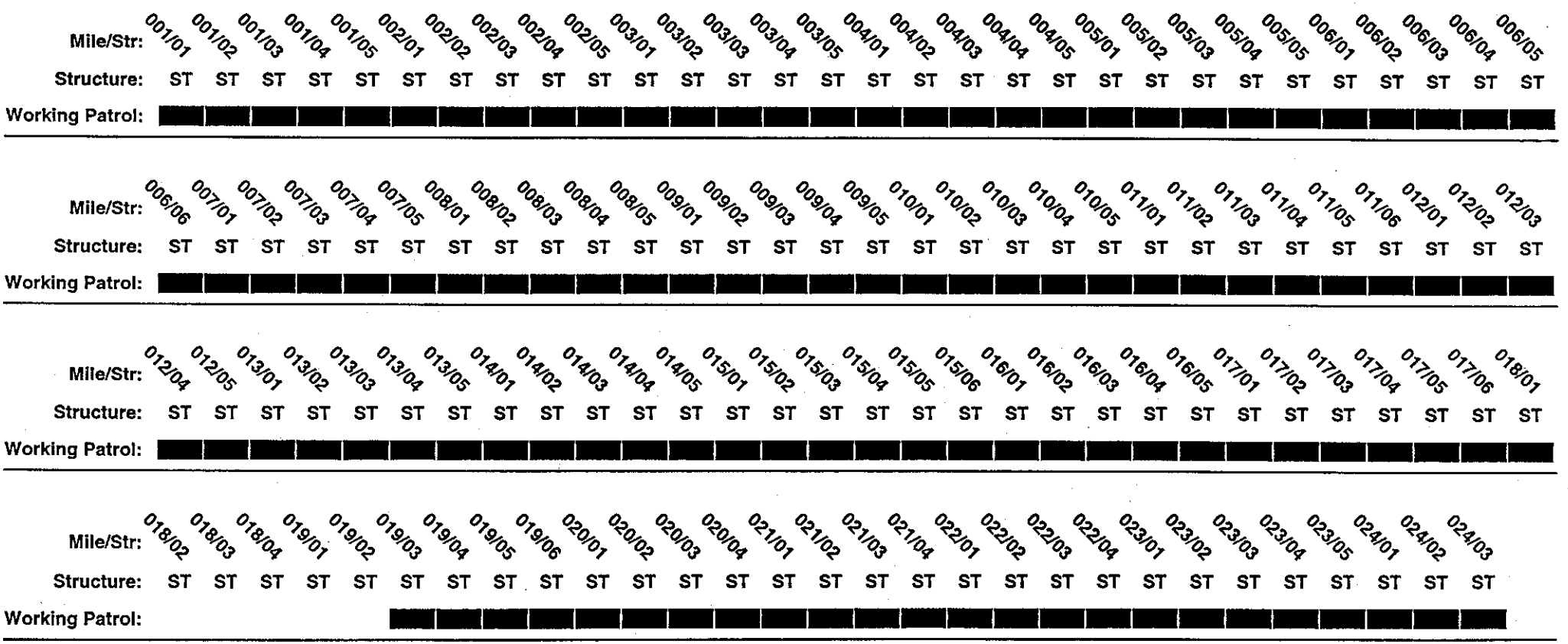
US Department of Energy
Bonneville Power Administration
Line Patrol Report

Adno: 8246 TACOMA-RAVER NO 1
Significant Equipment: Y WECC: N

Period: 10/1/2004 to 9/30/2005

Percent To Be Patrolled: 4.2%

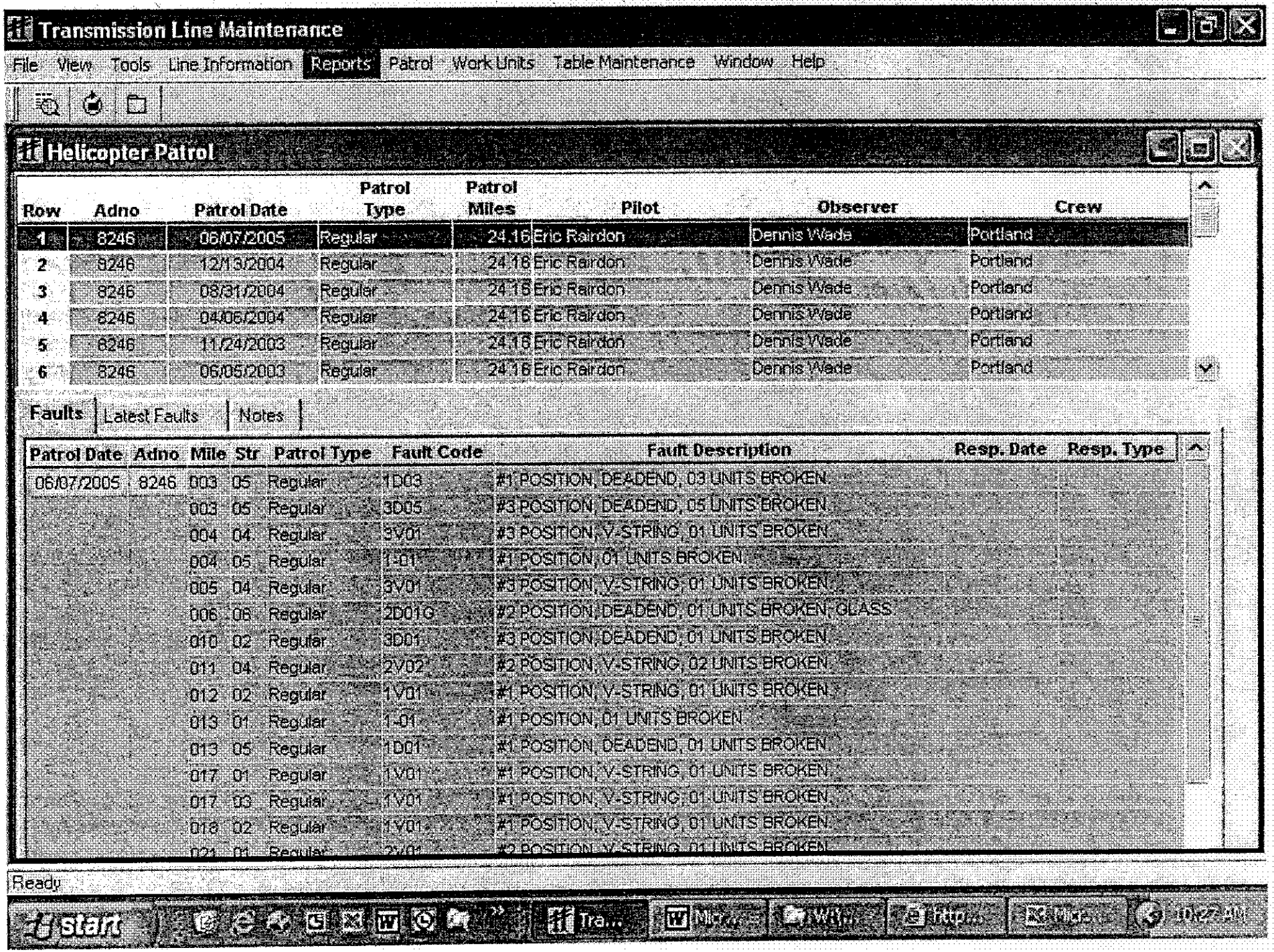
■ - Patrolled □ - To Be Patrolled

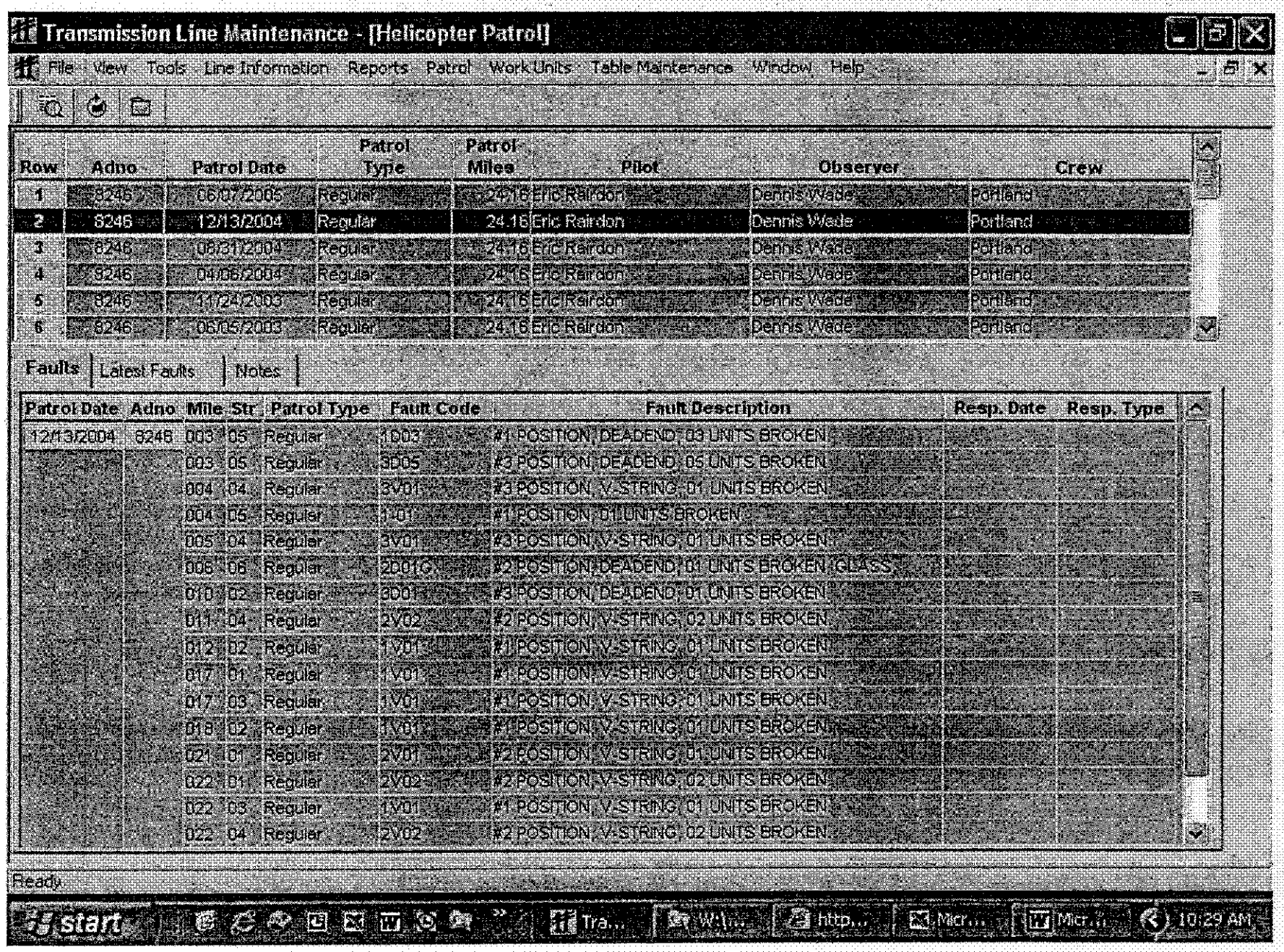


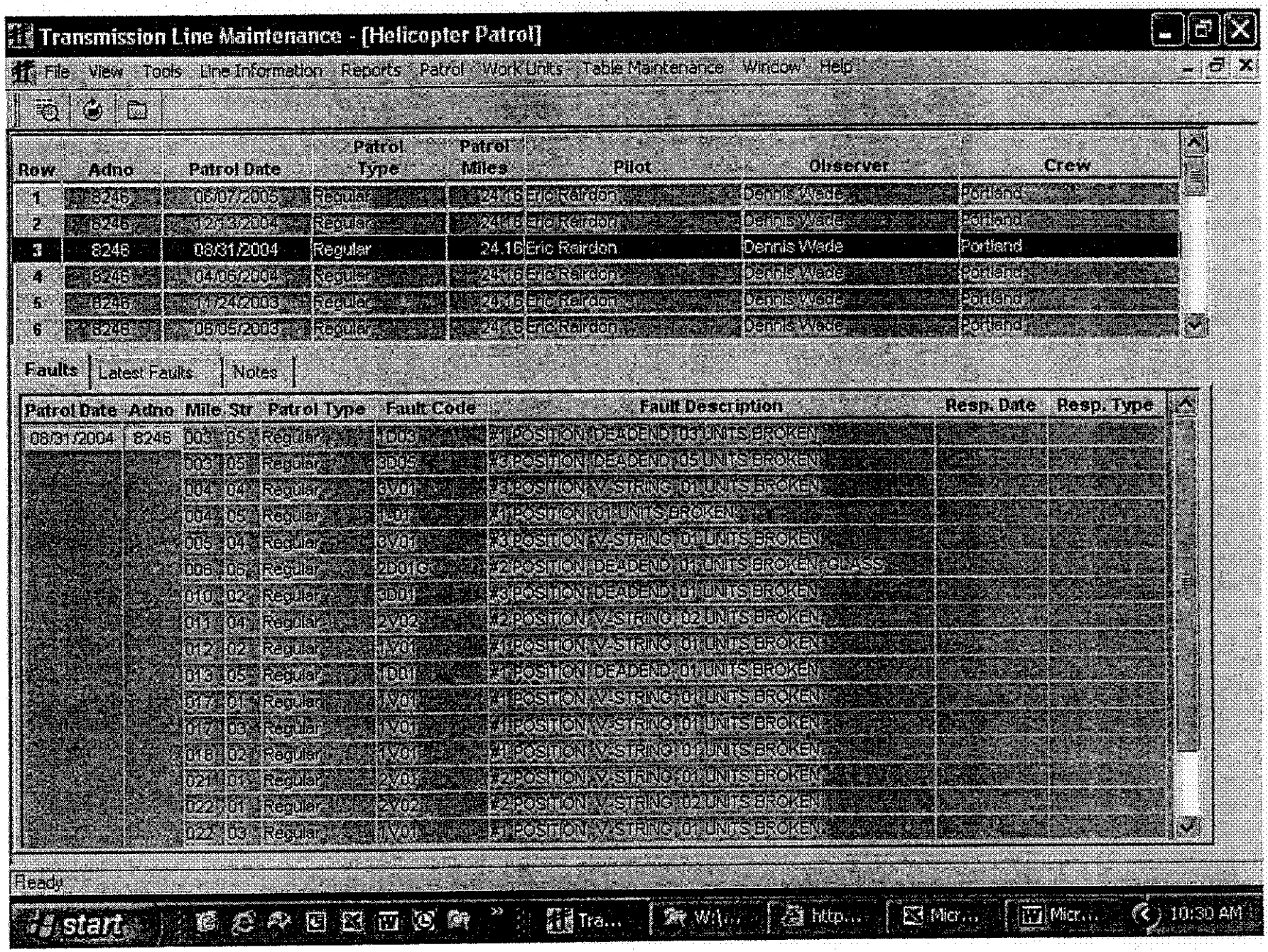
US Department of Energy
Bonneville Power Administration
Line Patrol Summary Report

Period: 10/1/2004 to 9/30/2005

Adno	Line Name	Sig. Equip.	WECC	Total Structures	To Be Patrolled	
					Structures	Percent
8246	TACOMA-RAVER NO 1	Y	N	119	5	4.2%
			Total:	119	5	4.2%


Transmission Line Maintenance
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Helicopter Patrol
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
1 8246 06/07/2005 Regular 24.16 Eric Rairdon Dennis Wade Portland
2 8246 12/13/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
3 8246 08/31/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
4 8246 04/06/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
5 8246 11/24/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
06/07/2005 8246 003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
021 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
Ready
start


Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row | Adno | Patrol Date | Patrol Type | Patrol Miles | Pilot | Observer | Crew
1 | 8246 | 06/07/2005 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
2 | 8246 | 12/13/2004 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
3 | 8246 | 06/31/2004 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
4 | 8246 | 04/06/2004 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
5 | 8246 | 11/24/2003 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
6 | 8246 | 06/05/2003 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
Faults | Latest Faults | Notes
Patrol Date | Adno | Mile Str | Patrol Type | Fault Code | Fault Description | Resp. Date | Resp. Type
12/13/2004 | 8246 | 003 05 | Regular | 1D03 | #1 POSITION, DEADEND, 03 UNITS BROKEN
003 05 | Regular | 3D05 | #3 POSITION, DEADEND, 05 UNITS BROKEN
004 04 | Regular | 3V01 | #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 | Regular | 1V01 | #1 POSITION, 01 UNITS BROKEN
005 04 | Regular | 3V01 | #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 | Regular | 2D01G | #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 02 | Regular | 3D01 | #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 | Regular | 2V02 | #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
017 01 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
017 03 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
018 02 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
021 01 | Regular | 2V01 | #2 POSITION, V-STRING, 01 UNITS BROKEN
022 01 | Regular | 2V02 | #2 POSITION, V-STRING, 02 UNITS BROKEN
022 03 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
022 04 | Regular | 2V02 | #2 POSITION, V-STRING, 02 UNITS BROKEN
Ready
start
10:29 AM


Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
1 8246 06/07/2005 Regular 24.16 Eric Rairdon Dennis Wade Portland
2 8246 12/13/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
3 8246 08/31/2004 Reguler 24.16 Eric Rairdon Dennis Wade Portland
4 8246 04/06/2004 Reguler 24.16 Eric Rairdon Dennis Wade Portland
5 8246 11/24/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
6 8246 08/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
08/31/2004 8246 003 05 Regular 1D03 #1 POSITION DEADEND 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION DEADEND 05 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
004 05 Regular 1D01 #1 POSITION 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION DEADEND 01 UNITS BROKEN GLASS
010 02 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
021 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
022 01 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
022 03 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
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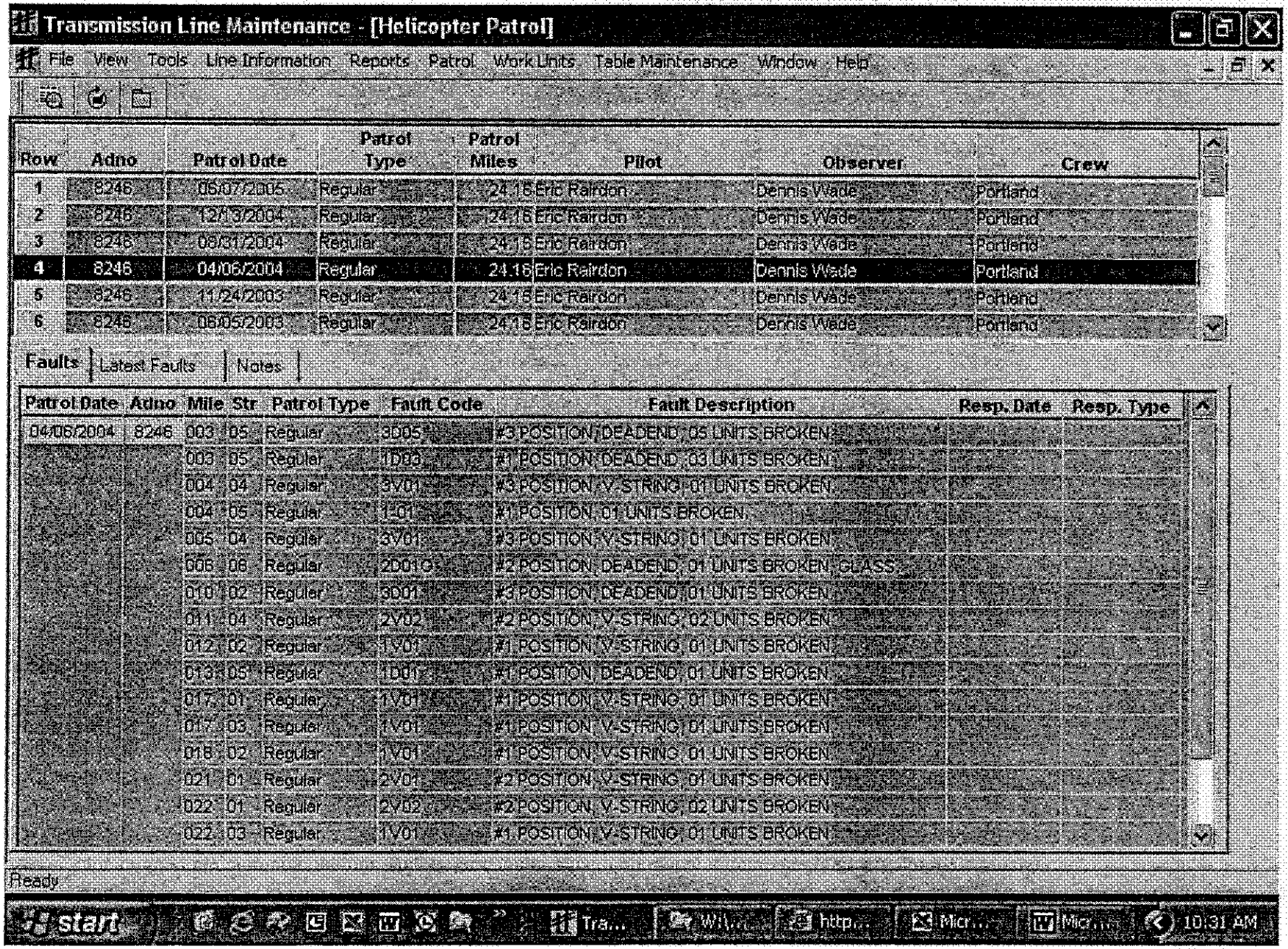
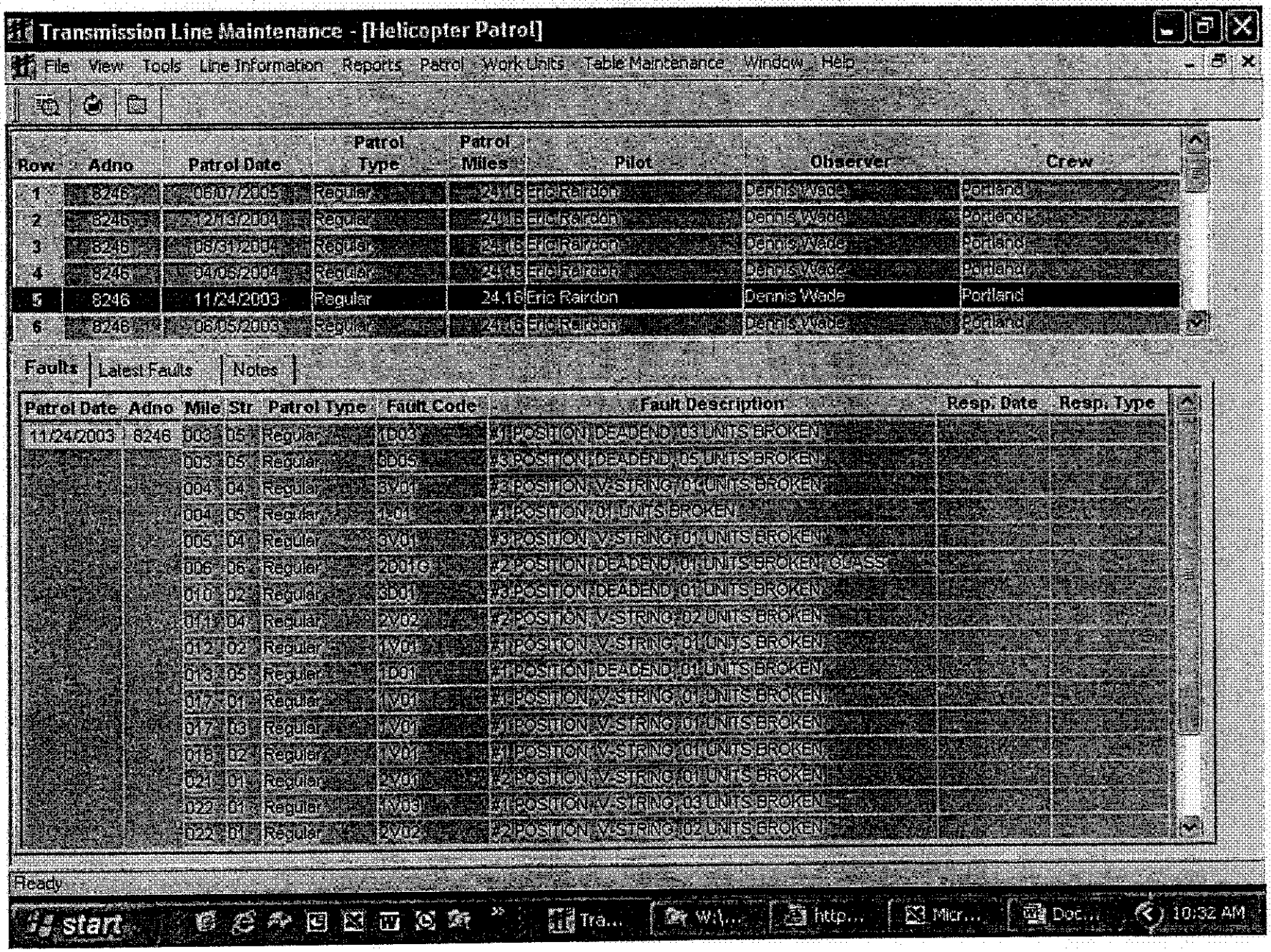

Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
1 8246 06/07/2005 Regular 24.16 Eric Rairdon Dennis Wade Portland
2 8246 12/13/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
3 8246 08/31/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
4 8246 04/06/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
5 8246 11/24/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
04/06/2004 8246 003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 Regular 1C01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
021 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
022 01 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
022 03 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
Ready
start
10:31 AM


Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
1 8246 06/07/2005 Regular 24.16 Eric Rairdon Dennis Wade Portland
2 8246 12/13/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
3 8246 08/31/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
4 8246 04/05/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
5 8246 11/24/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
11/24/2003 8246 003 05 Regular 1D03 #1 POSITION DEADEND 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION DEADEND 05 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
004 05 Regular 1D01 #1 POSITION 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION DEADEND 01 UNITS BROKEN GLASS
010 02 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
021 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
022 01 Regular 1V03 #1 POSITION V-STRING 03 UNITS BROKEN
022 01 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
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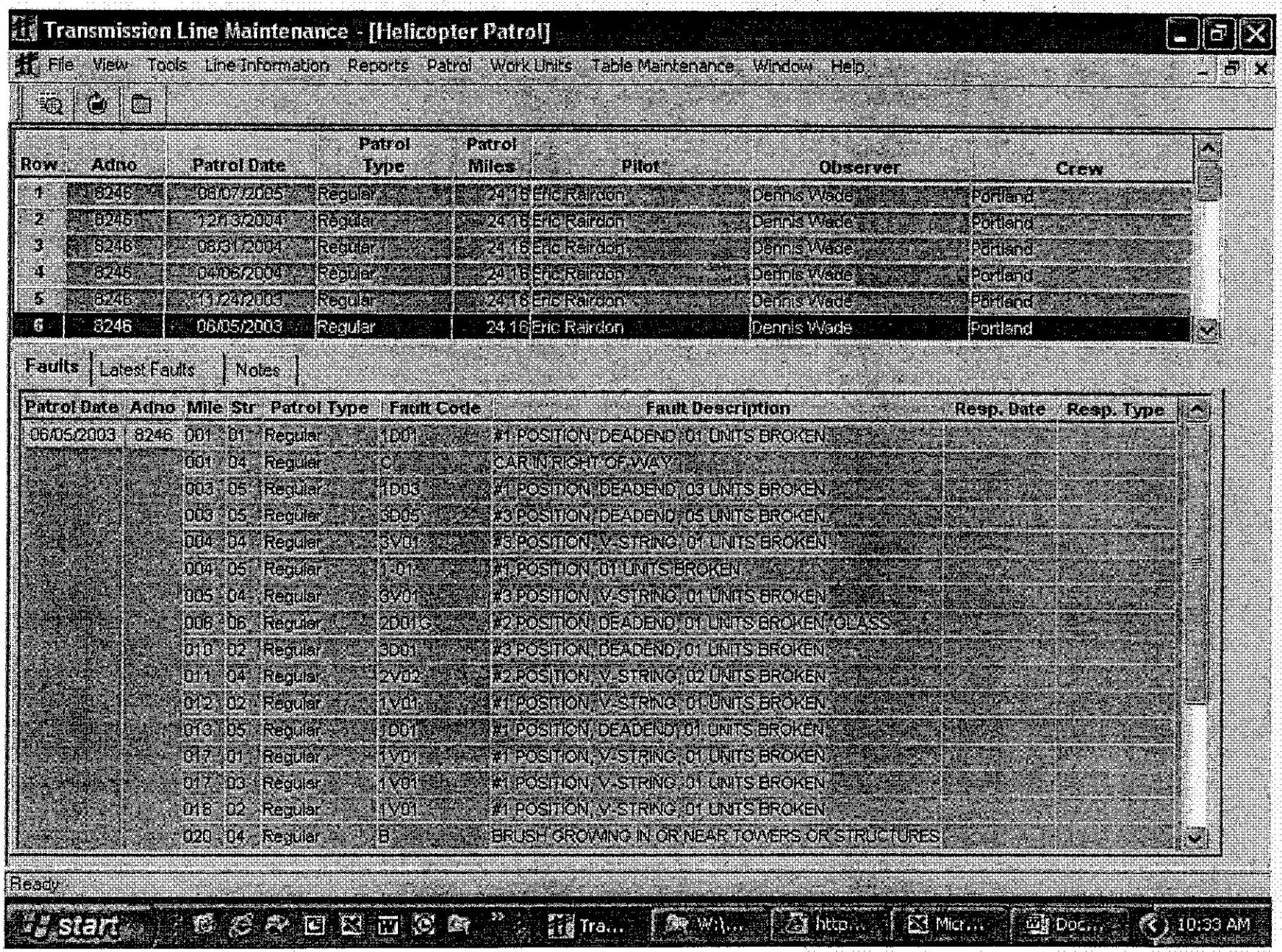
Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
1 8246 06/07/2005 Regular 24.15 Eric Rairdon Dennis Wade Portland
2 8246 12/13/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
3 8246 06/31/2004 Regular 24.15 Eric Rairdon Dennis Wade Portland
4 8246 04/06/2004 Regular 24.16 Eric Rairdon Dennis Wade Portland
5 8246 11/24/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
06/05/2003 8246 001 01 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
001 04 Regular C CAR IN RIGHT OF WAY
003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 Regular 1 01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
020 04 Regular B BRUSH GROWING IN OR NEAR TOWERS OR STRUCTURES
Ready
start
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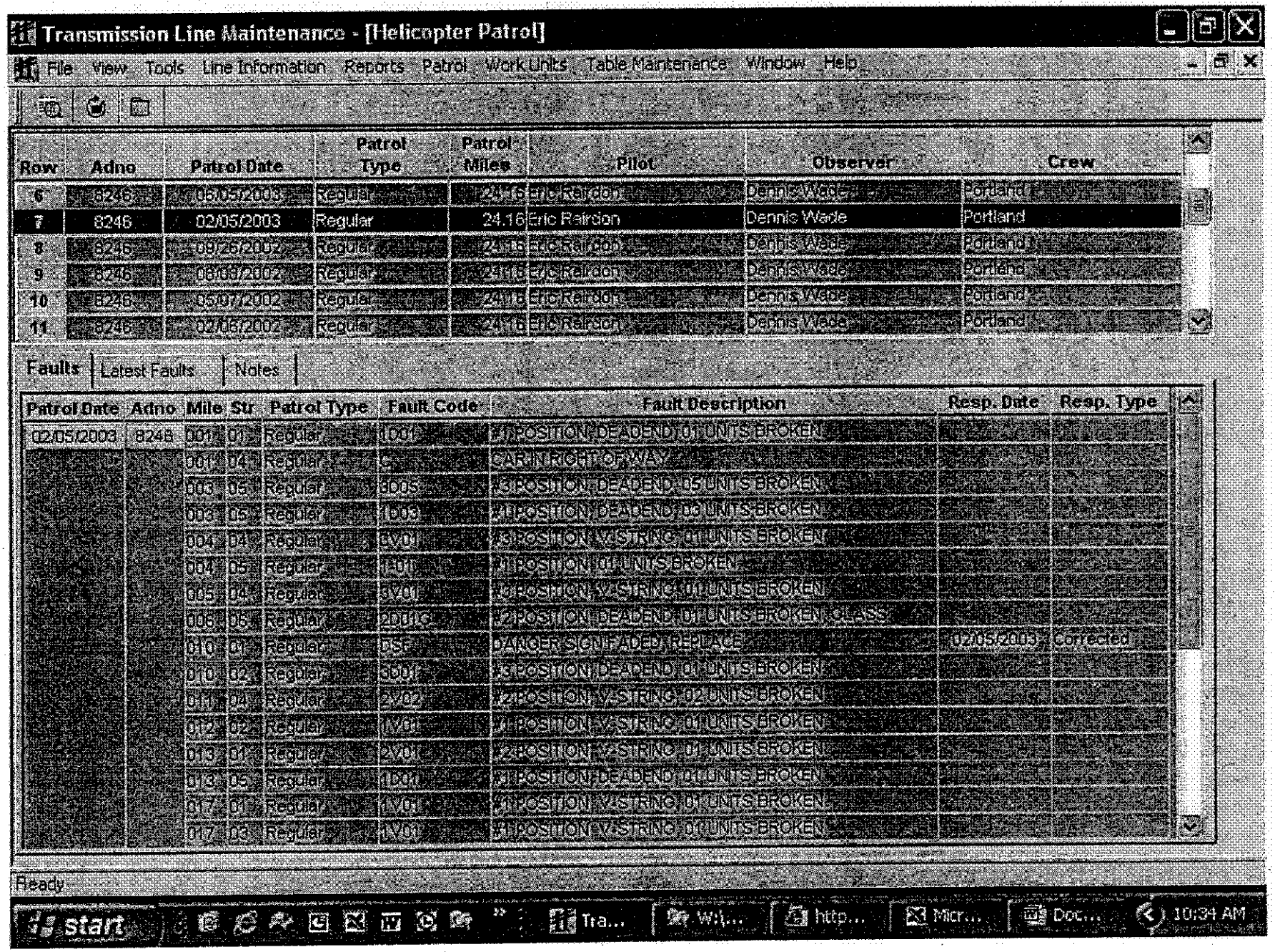
10:33 AM


Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
6 8246 05/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
7 8246 02/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
8 8246 09/26/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
9 8246 06/03/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
10 8246 03/07/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
02/05/2003 8246 001 01 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
001 04 Regular CAR IN RIGHT OF WAY
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 Regular 1D01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 01 Regular DSE DANGER SIGN FADED, REPLACE 02/05/2003 Corrected
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
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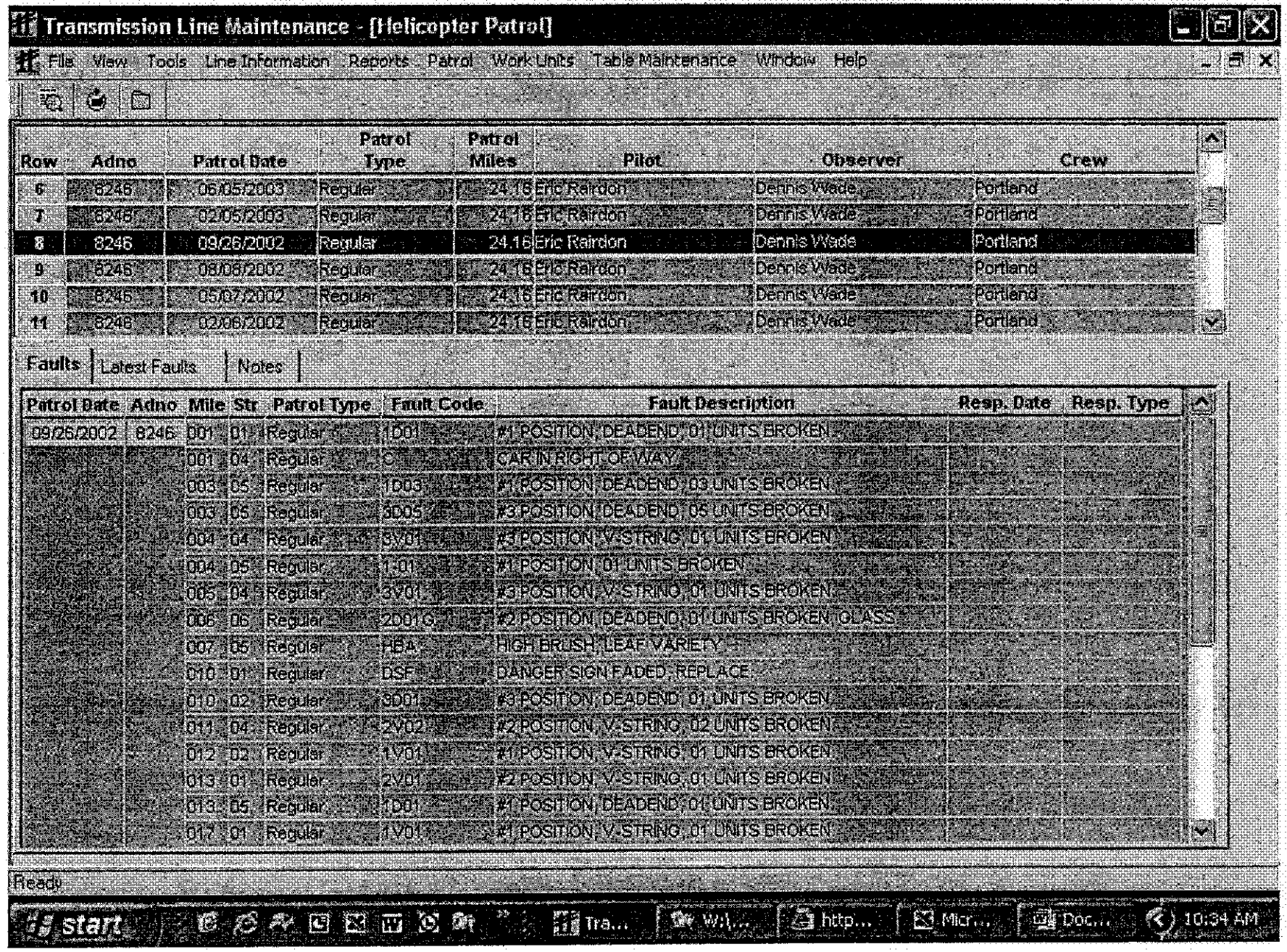
Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
7 8246 02/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
8 8246 09/26/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
9 8246 08/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
10 8246 05/07/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
09/25/2002 8246 001 01 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
001 04 Regular C CAR IN RIGHT OF WAY
003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
003 06 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
007 06 Regular HBA HIGH BRUSH, LEAF VARIETY
010 01 Regular DSF DANGER SIGN FADED, REPLACE
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
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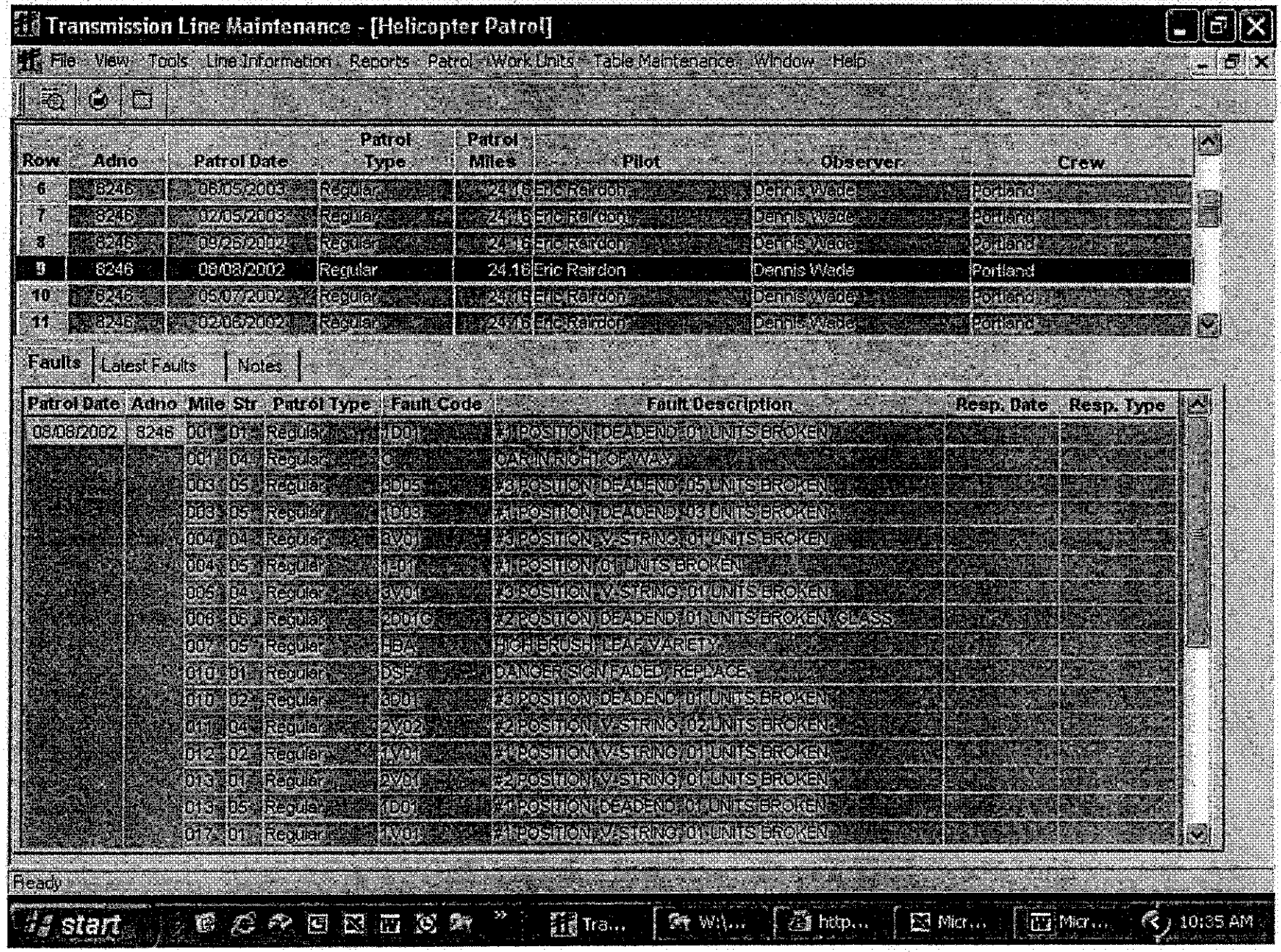
Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
7 8246 02/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
8 8246 09/26/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
9 8246 08/08/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
10 8246 05/07/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
08/08/2002 8246 001 01 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
001 04 Regular CAR CAR RIGHT OF WAY
003 05 Regular 3D05 #3 POSITION DEADEND 05 UNITS BROKEN
003 05 Regular 1D03 #1 POSITION DEADEND 03 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
004 05 Regular 1-01 #1 POSITION 01 UNITS BROKEN
006 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION DEADEND 01 UNITS BROKEN GLASS
007 05 Regular HBA HIGH BRUSH LEAF VARETY
010 01 Regular DSF DANGER SIGN FADED REPLACE
010 02 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
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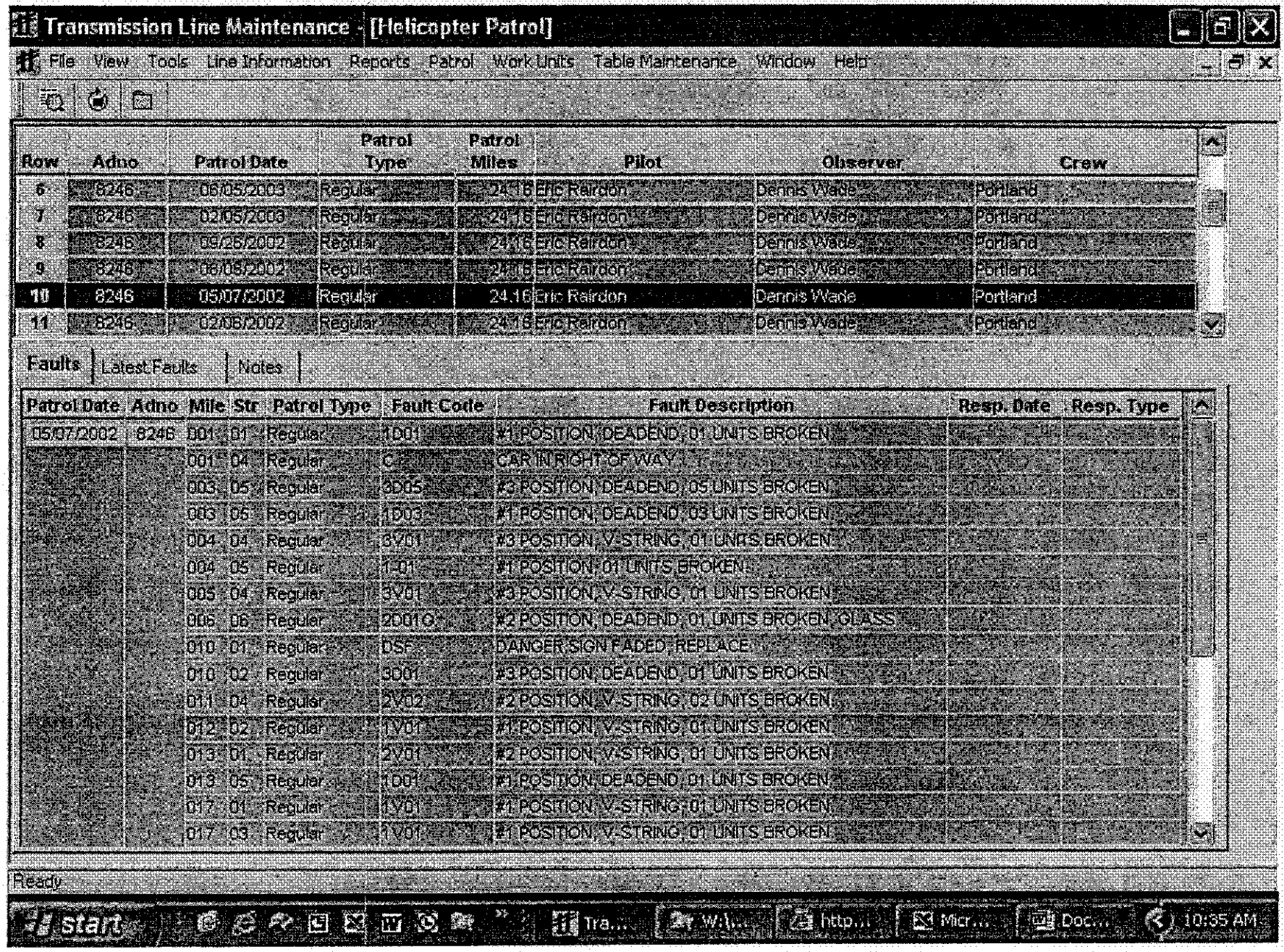
Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
7 8246 02/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
8 8246 09/26/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
9 8246 06/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
10 8246 05/07/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
05/07/2002 8246 001 01 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
001 04 Regular C CAR IN RIGHT OF WAY
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
003 06 Regular 1B03 #1 POSITION, DEADEND, 03 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
004 05 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 01 Regular DSF DANGER SIGN FADED, REPLACE
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
017 03 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
Ready
start
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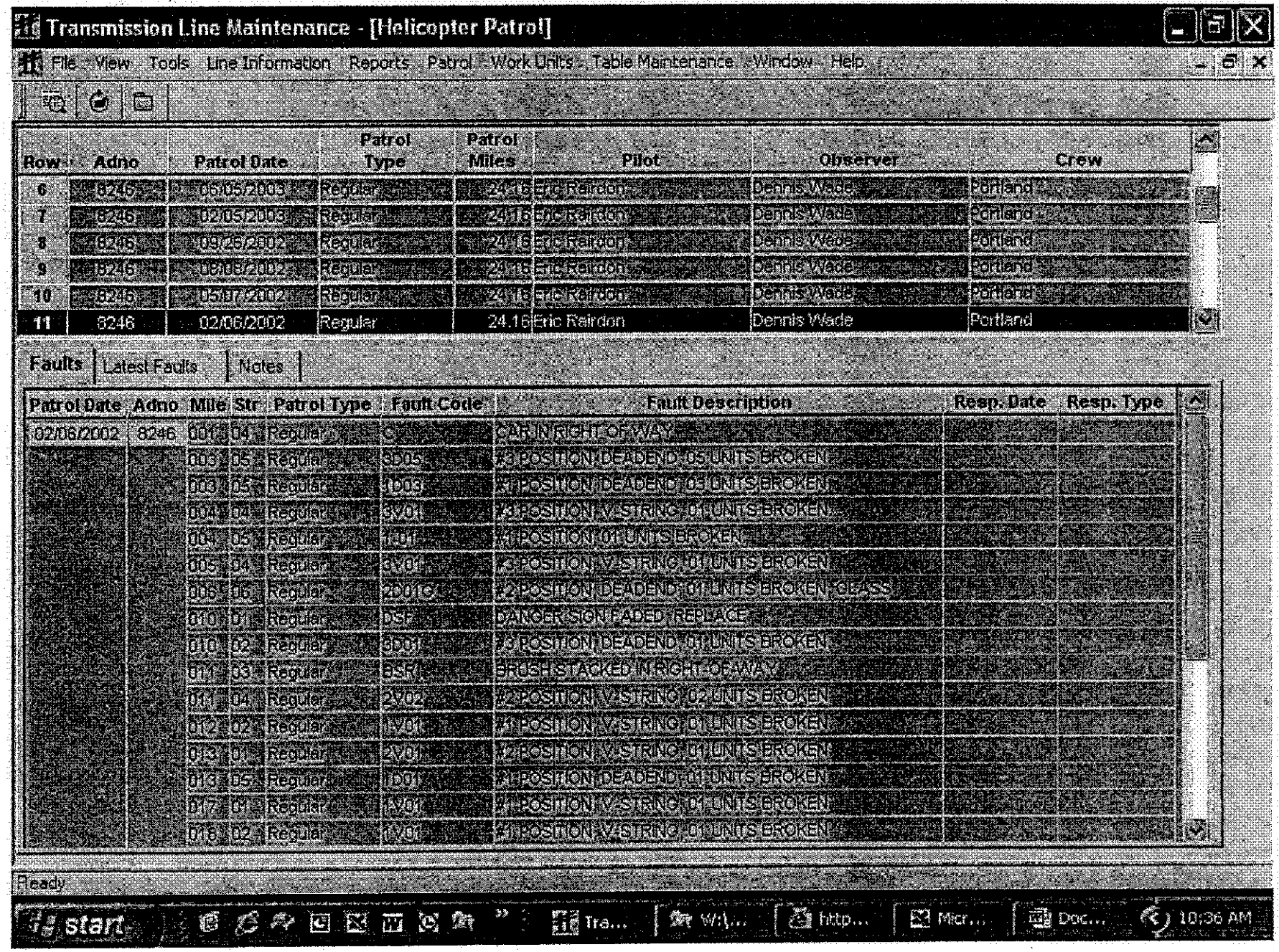
Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
6 8246 06/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
7 8246 02/05/2003 Regular 24.16 Eric Rairdon Dennis Wade Portland
8 8246 09/26/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
9 8246 06/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
10 8246 05/07/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
02/06/2002 8246 001 04 Regular C CAR IN RIGHT OF WAY
003 05 Regular 3D05 #3 POSITION DEADEND 05 UNITS BROKEN
003 05 Regular 1D03 #1 POSITION DEADEND 03 UNITS BROKEN
004 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
004 05 Regular 1 01 #1 POSITION 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION DEADEND 01 UNITS BROKEN GLASS
010 01 Regular DSF DANGER SIGN FADED REPLACE
010 02 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
011 03 Regular BSR BRUSH STACKED IN RIGHT OF WAY
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
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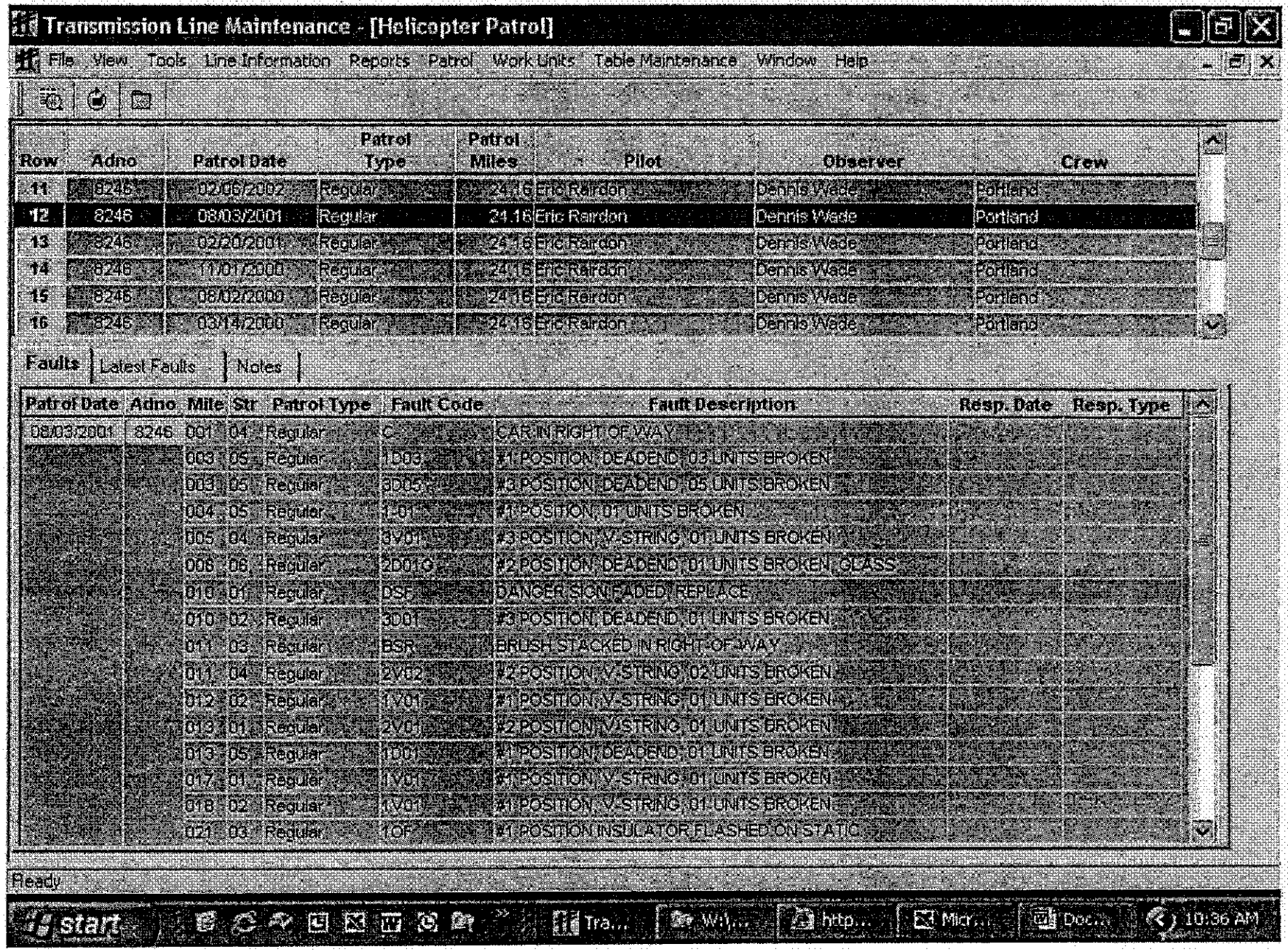
Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
12 8246 08/03/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
13 8246 02/20/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
14 8246 11/01/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
15 8246 08/02/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
16 8246 03/14/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
08/03/2001 8246 001 04 Regular C CAR IN RIGHT OF WAY
003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
004 05 Regular 1 01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
010 01 Regular DSF DANGER SIGN FADED, REPLACE
010 02 Regular 3D01 #3 POSITION, DEADEND, 01 UNITS BROKEN
011 03 Regular BSR BRUSH STACKED IN RIGHT-OF-WAY
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
021 03 Regular 1OF #1 POSITION INSULATOR FLASHED ON STATIC
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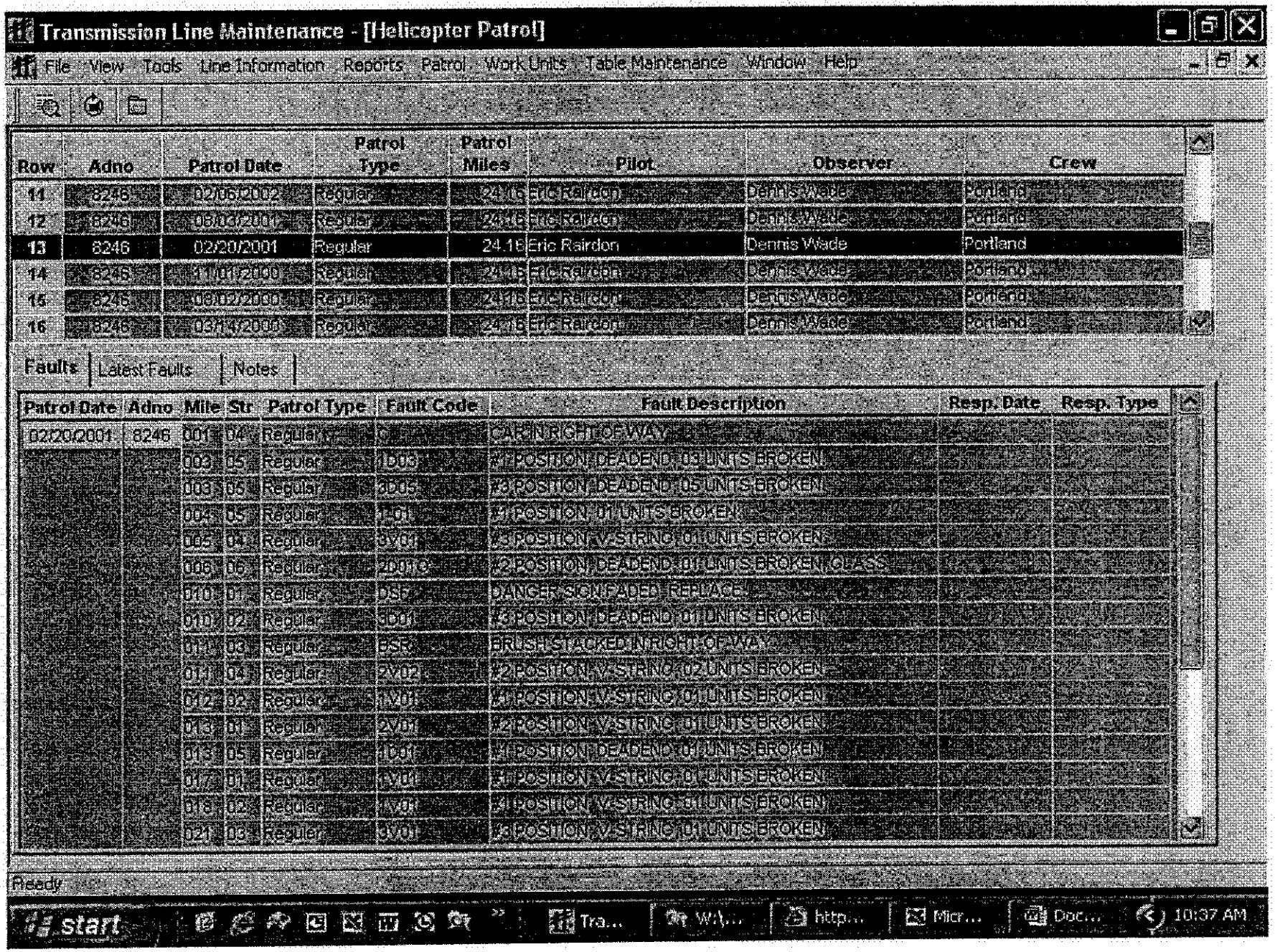
Transmission Line Maintenance - [Helicopter Patrol]
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Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
12 8246 08/03/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
13 8246 02/20/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
14 8246 11/01/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
15 8246 08/02/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
16 8246 03/14/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
02/20/2001 8246 001 04 Regular CAR IN RIGHT OF WAY
003 05 Regular 1D03 #1 POSITION DEADEND 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION DEADEND 05 UNITS BROKEN
004 05 Regular 1D01 #1 POSITION 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
006 06 Regular 2D01 #2 POSITION DEADEND 01 UNITS BROKEN GLASS
010 01 Regular DSF DANGER SIGN FADED REPLACE
010 02 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
011 03 Regular BSR BRUSH STACKED IN RIGHT OF WAY
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
018 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
021 03 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
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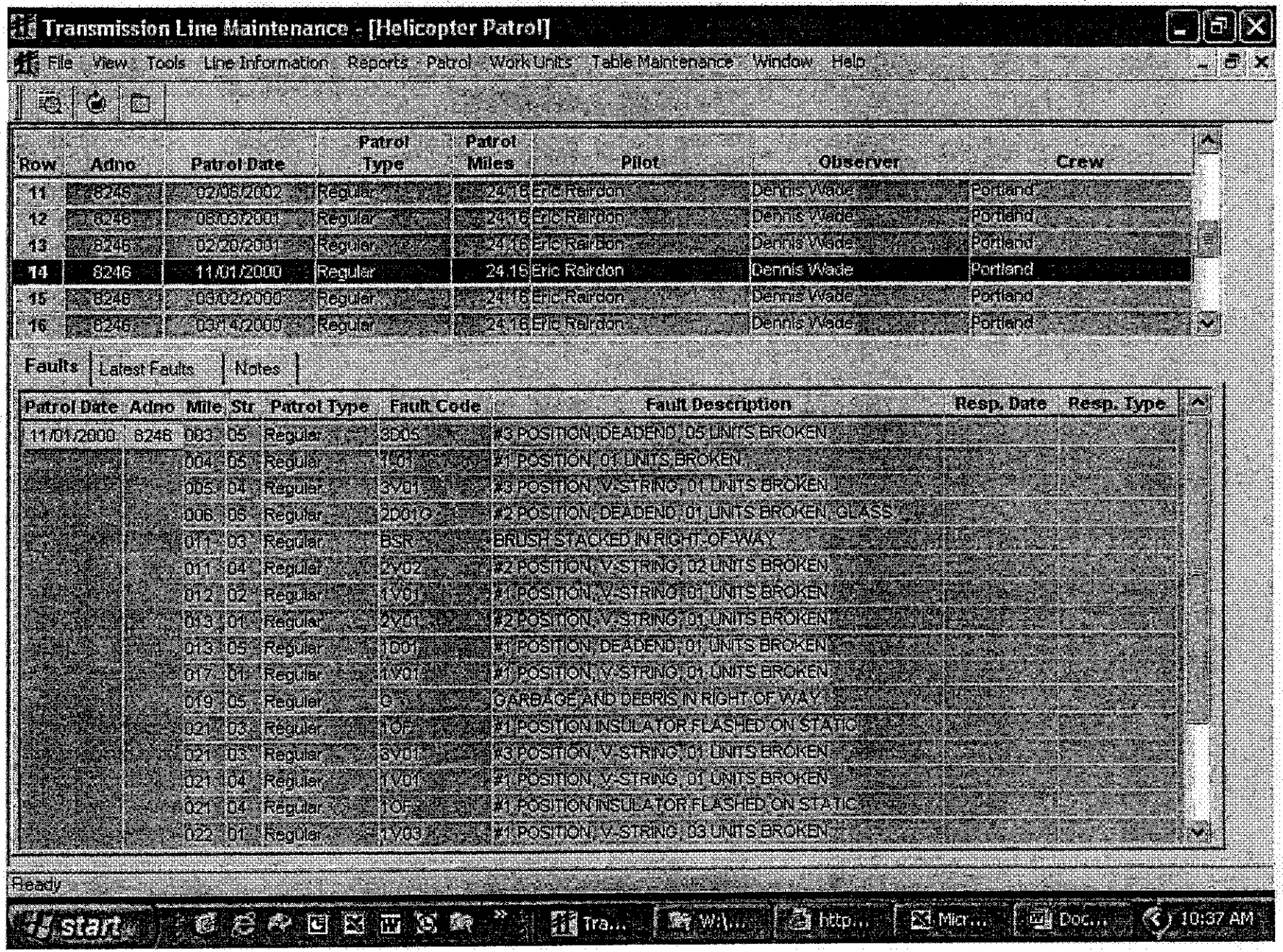
Transmission Line Maintenance - [Helicopter Patrol]
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Row | Adno | Patrol Date | Patrol Type | Patrol Miles | Pilot | Observer | Crew
11 | 8246 | 02/06/2002 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
12 | 8246 | 08/03/2001 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
13 | 8246 | 02/20/2001 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
14 | 8246 | 11/01/2000 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
15 | 8246 | 09/02/2000 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
16 | 8246 | 03/14/2000 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
Faults | Latest Faults | Notes
Patrol Date | Adno | Mile | Str | Patrol Type | Fault Code | Fault Description | Resp. Date | Resp. Type
11/01/2000 | 8246 | 003 | 05 | Regular | 3D05 | #3 POSITION, DEADEND, 05 UNITS BROKEN
004 | 05 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
005 | 04 | Regular | 3V01 | #3 POSITION, V-STRING, 01 UNITS BROKEN
006 | 05 | Regular | 2D01 | #2 POSITION, DEADEND, 01 UNITS BROKEN, GLASS
011 | 03 | Regular | BSR | BRUSH STACKED IN RIGHT-OF-WAY
011 | 04 | Regular | 2V02 | #2 POSITION, V-STRING, 02 UNITS BROKEN
012 | 02 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
013 | 01 | Regular | 2V01 | #2 POSITION, V-STRING, 01 UNITS BROKEN
013 | 05 | Regular | 1D01 | #1 POSITION, DEADEND, 01 UNITS BROKEN
017 | 01 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
019 | 05 | Regular | G | GARBAGE AND DEBRIS IN RIGHT OF WAY
021 | 03 | Regular | 1OF | #1 POSITION INSULATOR FLASHED ON STATIC
021 | 03 | Regular | 3V01 | #3 POSITION, V-STRING, 01 UNITS BROKEN
021 | 04 | Regular | 1V01 | #1 POSITION, V-STRING, 01 UNITS BROKEN
021 | 04 | Regular | 1OF | #1 POSITION INSULATOR FLASHED ON STATIC
022 | 01 | Regular | 1V03 | #1 POSITION, V-STRING, 03 UNITS BROKEN
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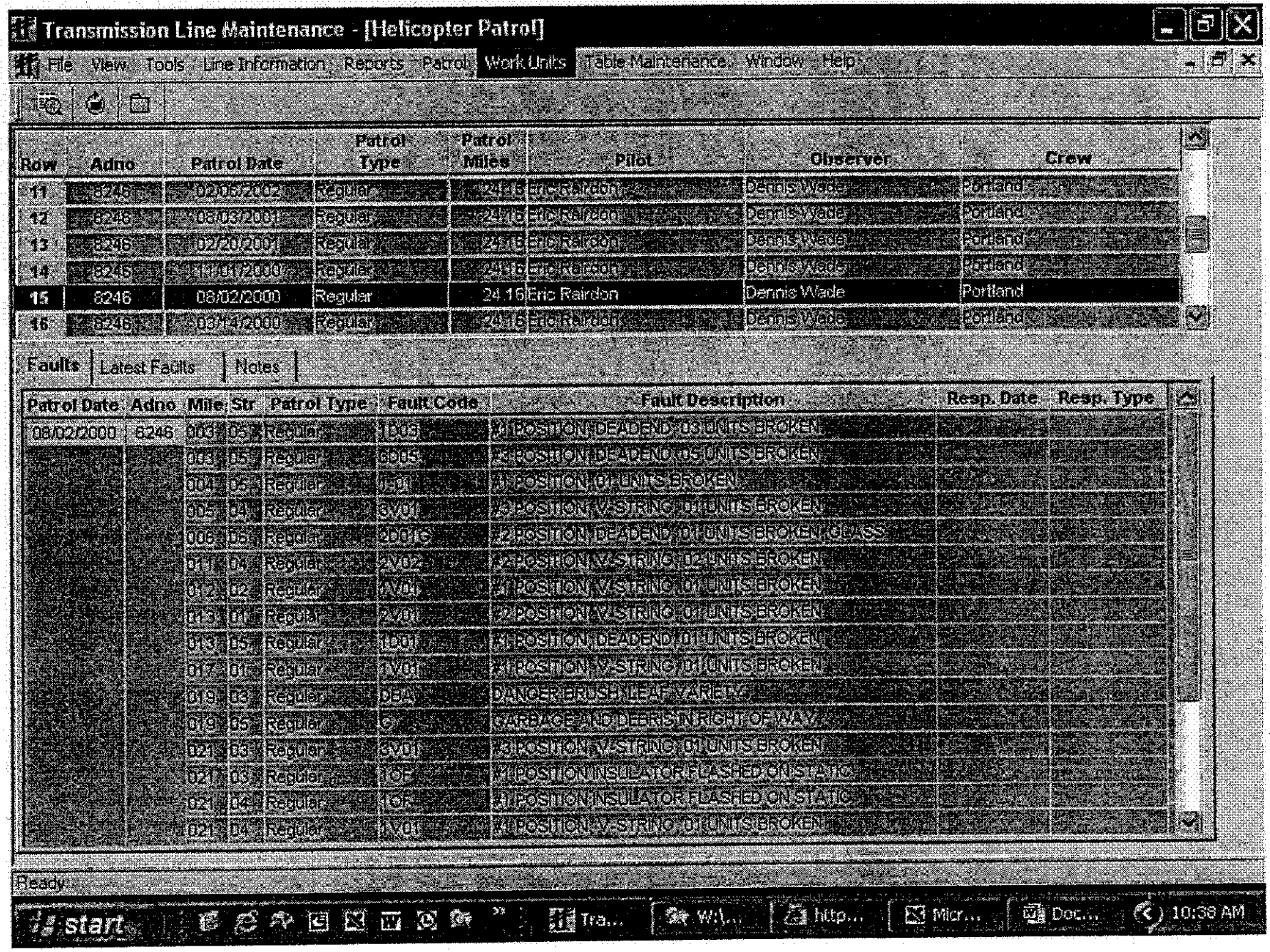
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11 8246 02/05/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
12 8246 08/03/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
13 8246 02/20/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
14 8246 11/01/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
15 8246 08/02/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
16 8246 03/14/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
08/02/2000 8246 003 05 Regular 1D03 #1 POSITION DEADEND 03 UNITS BROKEN
003 05 Regular 6D05 #3 POSITION DEADEND 05 UNITS BROKEN
004 06 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
006 05 Regular 2D01G #2 POSITION DEADEND 01 UNITS BROKEN GLASS
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION DEADEND 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
019 03 Regular DBA DANGER BRUSH LEAF VARIETY
019 05 Regular G GARBAGE AND DEBRIS IN RIGHT OF WAY
021 03 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
021 03 Regular 1OB #1 POSITION INSULATOR FLASHED ON STATIC
021 04 Regular 1OB #1 POSITION INSULATOR FLASHED ON STATIC
021 04 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
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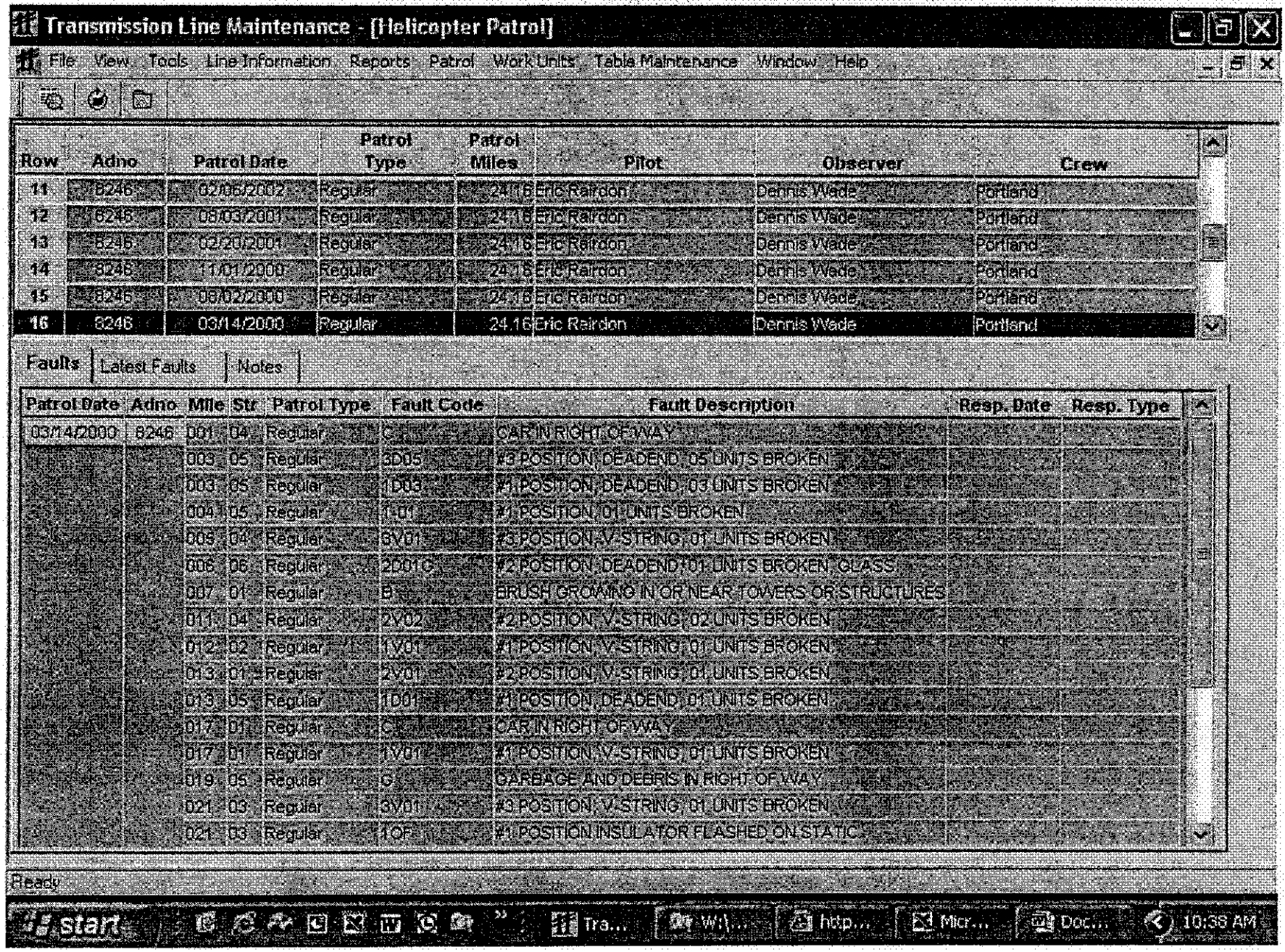
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File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
11 8246 02/06/2002 Regular 24.16 Eric Rairdon Dennis Wade Portland
12 8246 08/03/2001 Regular 24.16 Eric Rairdon Dennis Wade Portland
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14 8246 11/01/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
15 8246 08/02/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
16 8246 03/14/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
03/14/2000 8246 001 04 Regular C CAR IN RIGHT OF WAY
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
003 05 Regular 1D03 #1 POSITION, DEADEND, 03 UNITS BROKEN
004 05 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
006 06 Regular 2D01G #2 POSITION, DEADEND 01 UNITS BROKEN, GLASS
007 01 Regular B BRUSH GROWING IN OR NEAR TOWERS OR STRUCTURES
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
013 05 Regular 1D01 #1 POSITION, DEADEND, 01 UNITS BROKEN
017 01 Regular C CAR IN RIGHT OF WAY
017 01 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
019 05 Regular G GARBAGE AND DEBRIS IN RIGHT OF WAY
021 03 Regular 3V01 #3 POSITION, V-STRING, 01 UNITS BROKEN
021 03 Regular 1OF #1 POSITION INSULATOR FLASHED ON STATIC
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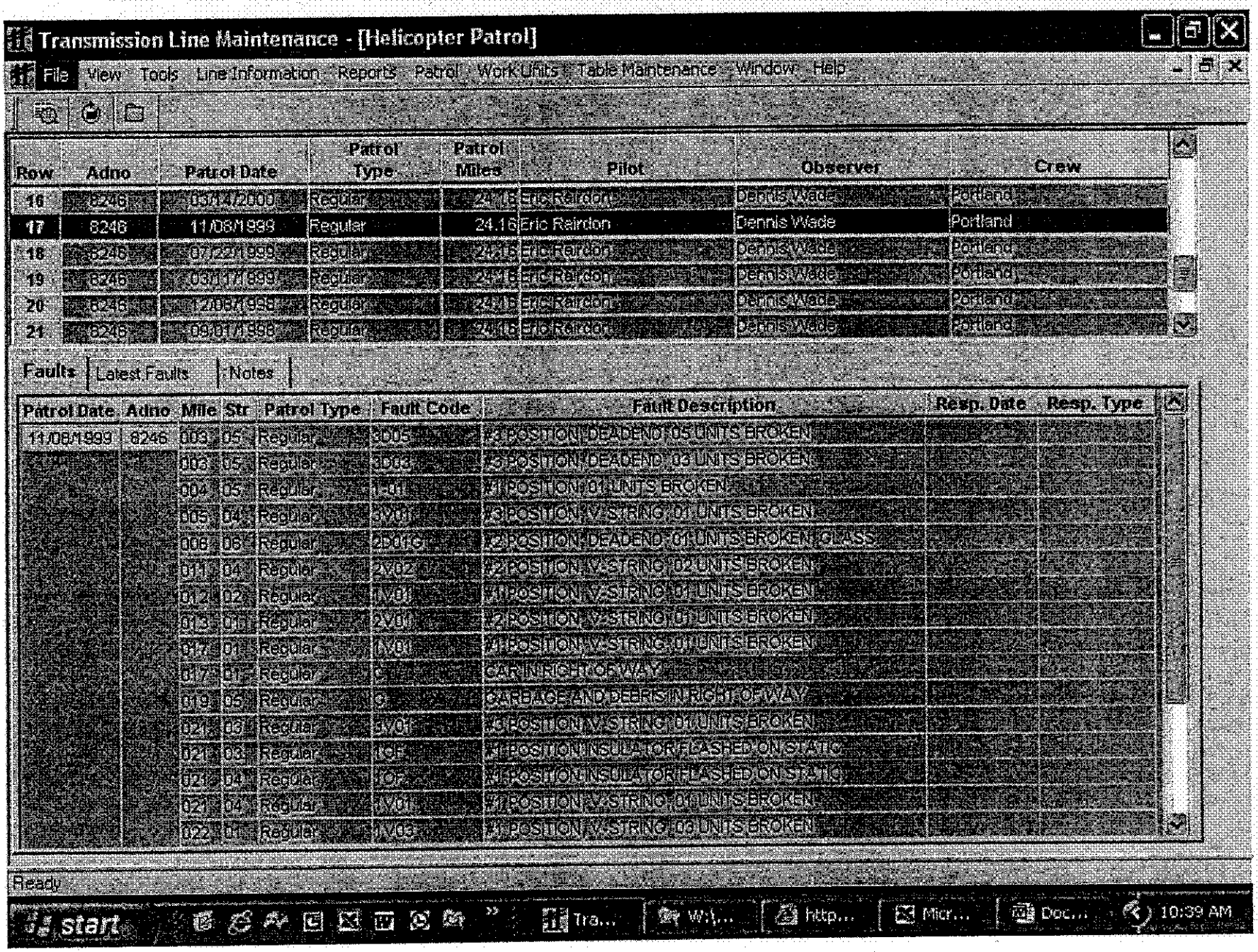
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16 8246 03/14/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
17 8246 11/08/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
18 8246 07/22/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
19 8246 03/17/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
20 8246 12/08/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
21 8246 08/17/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
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003 05 Regular 3D03 #3 POSITION DEADEND 03 UNITS BROKEN
004 05 Regular 1-01 #1 POSITION 01 UNITS BROKEN
005 04 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
008 06 Regular 2D01G #2 POSITION DEADEND 01 UNITS BROKEN GLASS
011 04 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION V-STRING 01 UNITS BROKEN
017 01 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
017 01 Regular CAR IN RIGHT-OF-WAY
019 05 Regular GARBAGE AND DEBRIS IN RIGHT-OF-WAY
021 03 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
021 03 Regular 1OF #1 POSITION INSULATOR FLASHED ON STATIC
021 04 Regular 1OF #1 POSITION INSULATOR FLASHED ON STATIC
021 04 Regular 1V01 #1 POSITION V-STRING 01 UNITS BROKEN
022 01 Regular 1V03 #1 POSITION V-STRING 03 UNITS BROKEN
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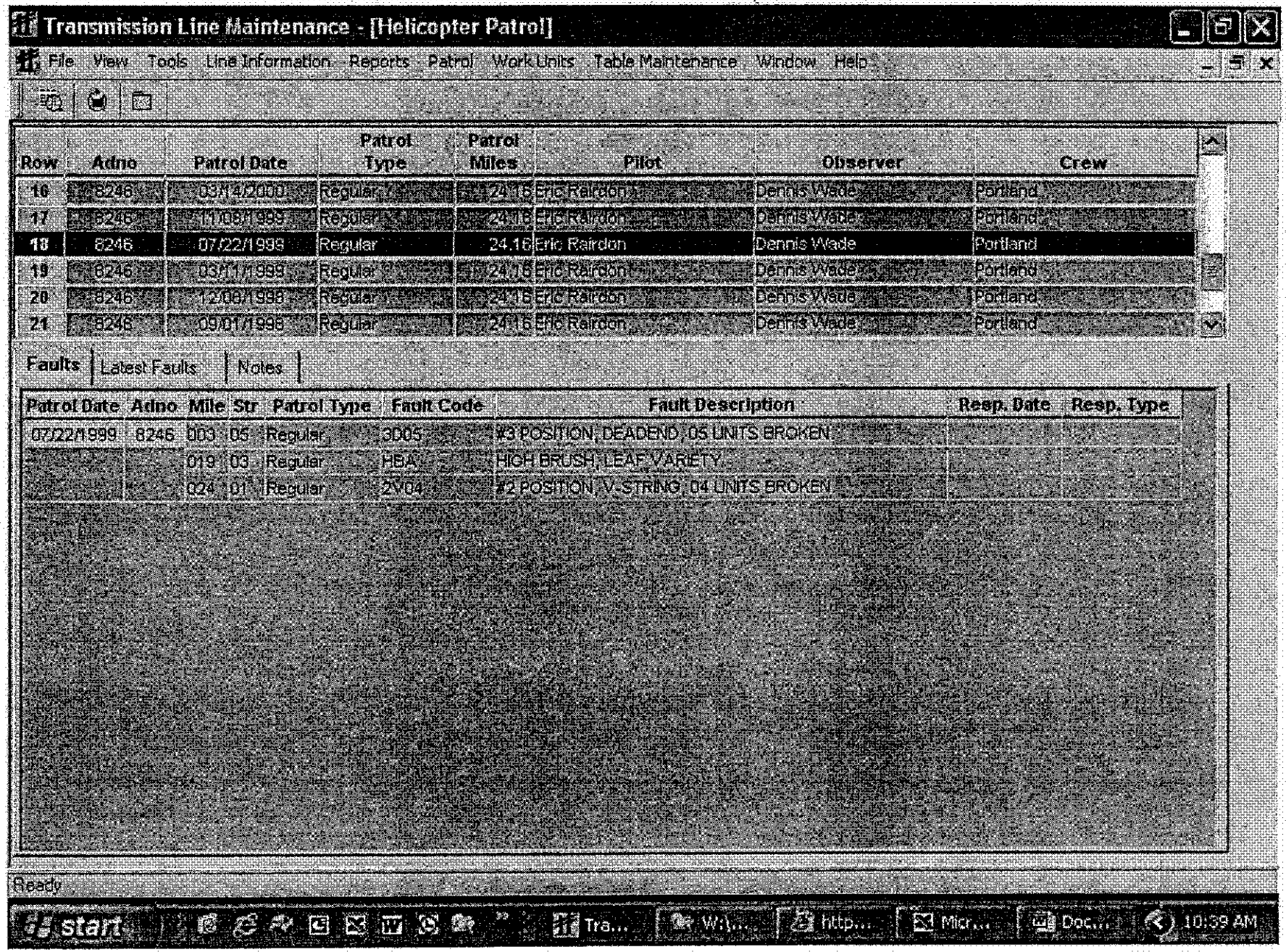
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17 8246 11/08/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
18 8246 07/22/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
19 8246 03/11/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
20 8246 12/08/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
21 8246 09/01/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
07/22/1999 8246 003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
019 03 Regular HBA HIGH BRUSH, LEAF VARIETY
024 01 Regular 2V04 #2 POSITION, V-STRING, 04 UNITS BROKEN
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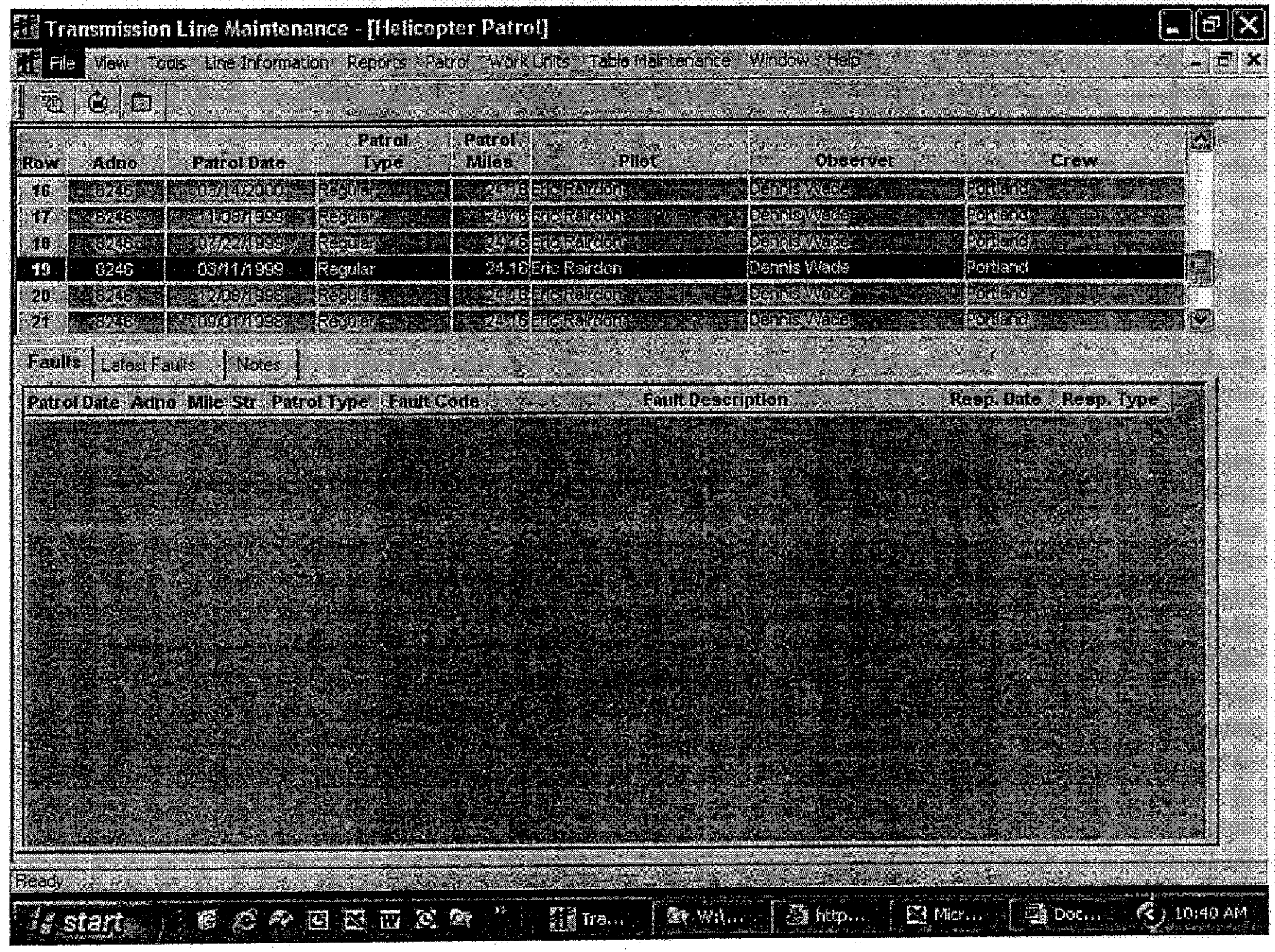
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Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
16 8246 03/14/2000 Regular 24.16 Eric Rairdon Dennis Wade Portland
17 8246 11/08/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
18 8246 07/22/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
19 8246 03/11/1999 Regular 24.16 Eric Rairdon Dennis Wade Portland
20 8246 12/06/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
21 8246 09/01/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
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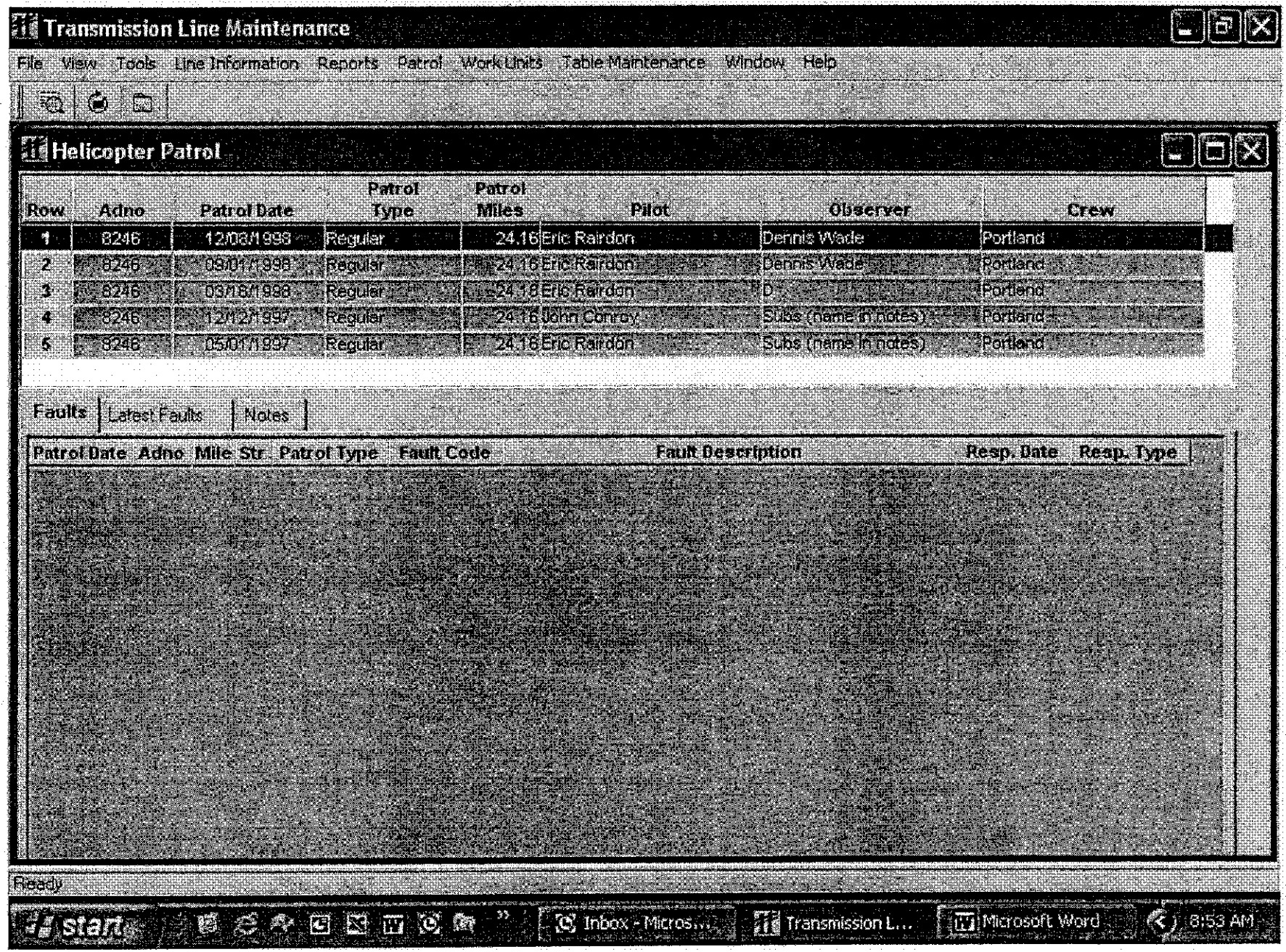
Transmission Line Maintenance
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Helicopter Patrol
Row | Adno | Patrol Date | Patrol Type | Patrol Miles | Pilot | Observer | Crew
1 | 8246 | 12/08/1998 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
2 | 8246 | 09/01/1998 | Regular | 24.16 | Eric Rairdon | Dennis Wade | Portland
3 | 8246 | 03/16/1998 | Regular | 24.16 | Eric Rairdon | D | Portland
4 | 8246 | 12/12/1997 | Regular | 24.16 | John Conroy | Subs (name in notes) | Portland
5 | 8246 | 05/01/1997 | Regular | 24.16 | Eric Rairdon | Subs (name in notes) | Portland
Faults | Latest Faults | Notes
Patrol Date | Adno | Mile Str | Patrol Type | Fault Code | Fault Description | Resp. Date | Resp. Type
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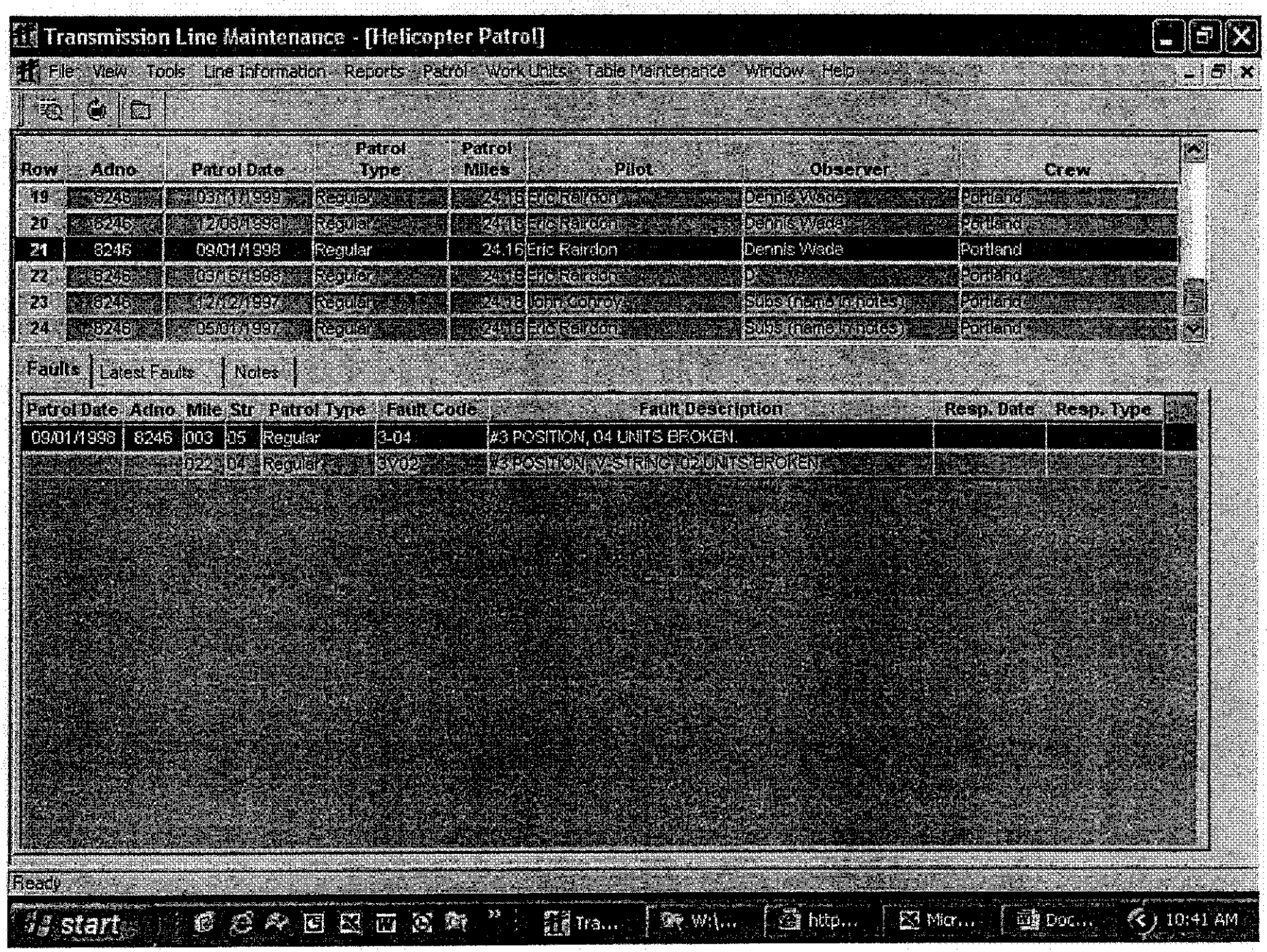
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Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
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21 8246 09/01/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
22 8246 03/16/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
23 8246 12/12/1997 Regular 24.16 John Conroy Subs (name in notes) Portland
24 8246 05/01/1997 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
09/01/1998 8246 003 05 Regular 3-04 #3 POSITION, 04 UNITS BROKEN.
022 04 Regular 3V02 #3 POSITION, V-STRING, 02 UNITS BROKEN.
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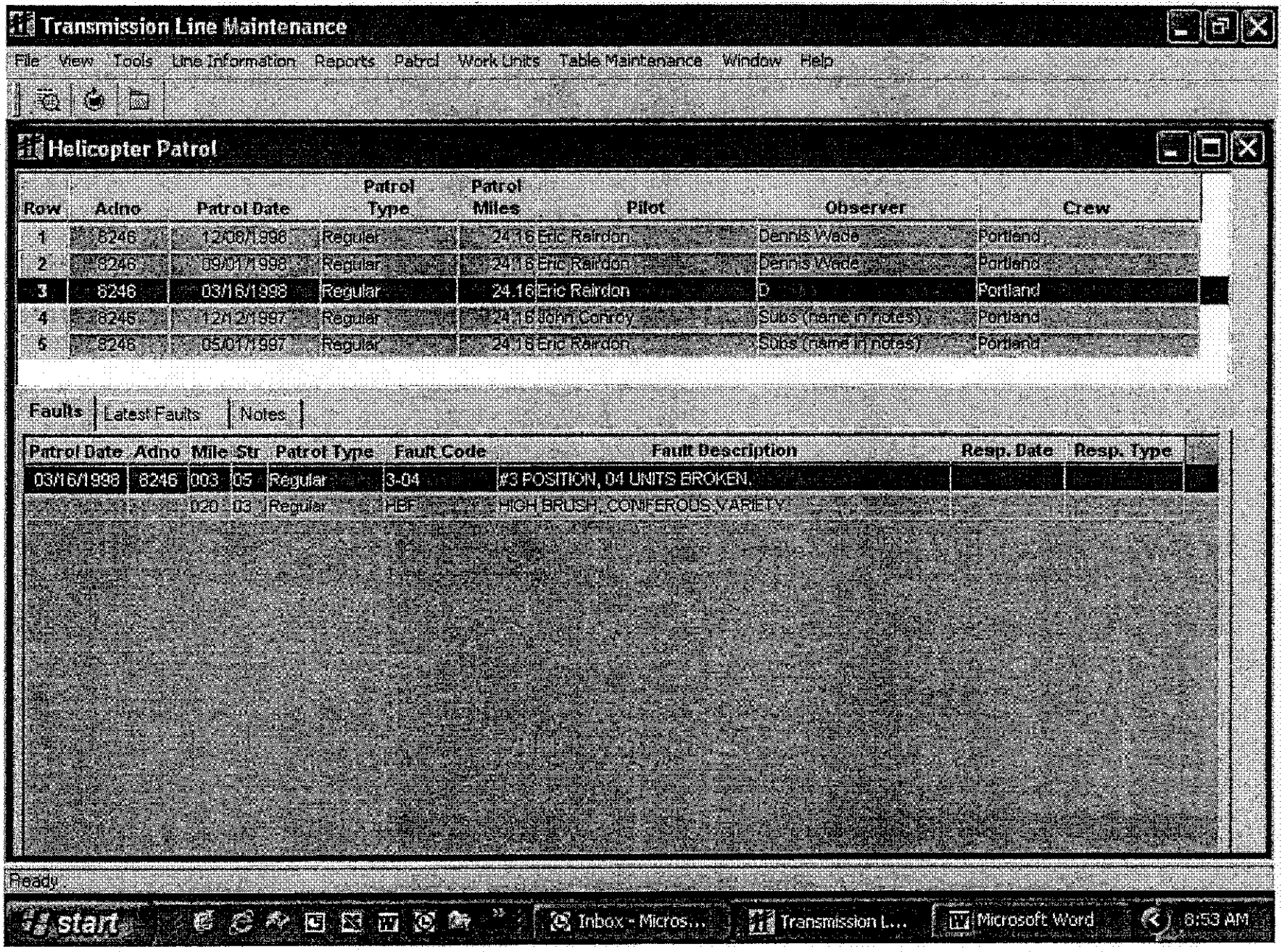
Transmission Line Maintenance
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Helicopter Patrol
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
1 6246 12/08/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
2 6246 09/01/1998 Regular 24.16 Eric Rairdon Dennis Wade Portland
3 6246 03/16/1998 Regular 24.16 Eric Rairdon D Portland
4 6246 12/12/1997 Regular 24.16 John Conroy Subs (name in notes) Portland
5 6246 05/01/1997 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
03/16/1998 6246 003 05 Regular 3-04 #3 POSITION, 04 UNITS BROKEN.
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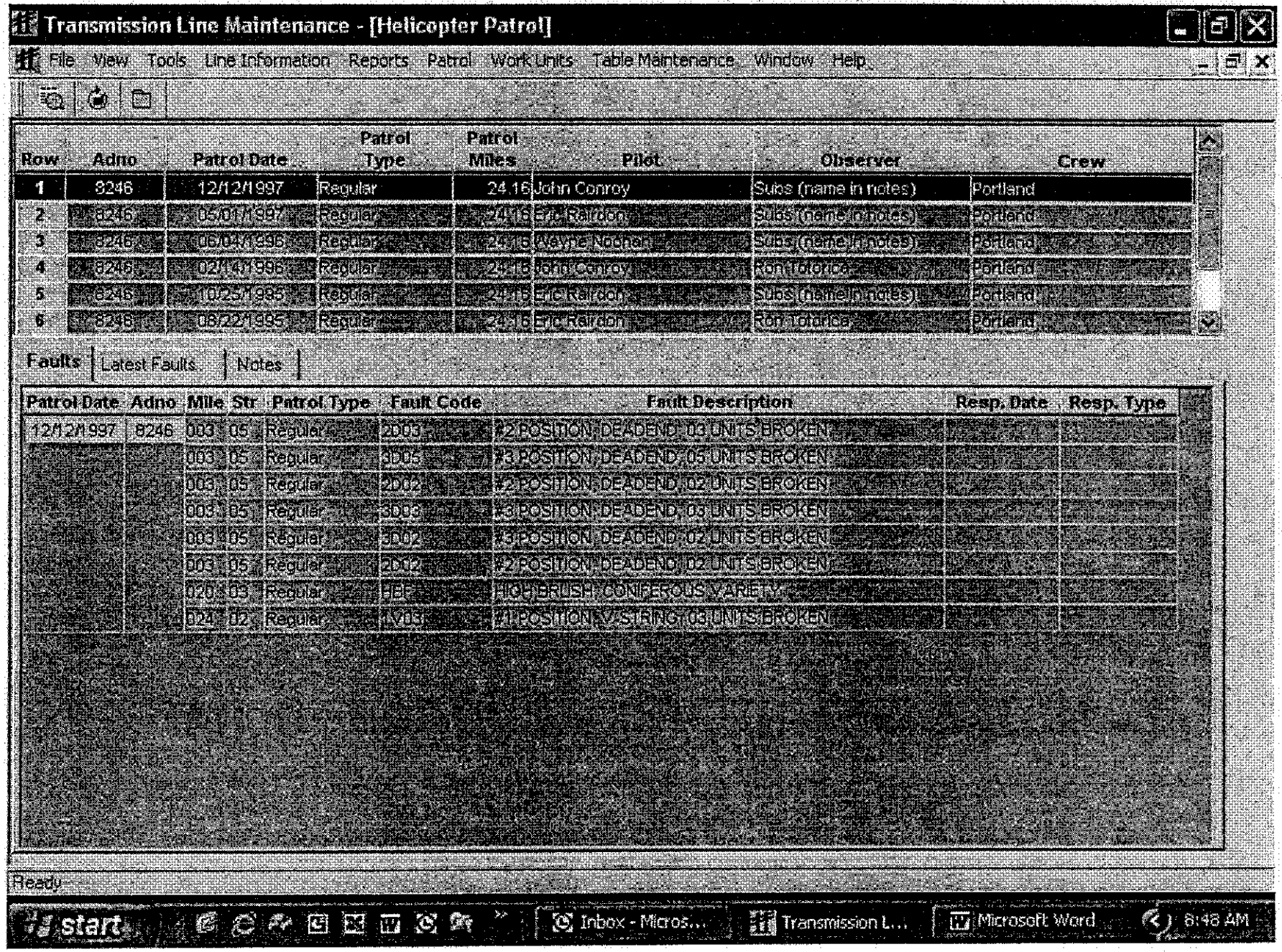
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Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
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2 8246 05/01/1997 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
3 8246 06/04/1996 Regular 24.16 Wayne Noonan Subs (name in notes) Portland
4 8246 02/14/1996 Regular 24.16 John Conroy Ron Tolonica Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
6 8246 08/22/1995 Regular 24.16 Eric Rairdon Ron Tolonica Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
12/12/1997 8246 003 05 Regular 2D03 #2 POSITION, DEADEND, 03 UNITS BROKEN
003 05 Regular 3D05 #3 POSITION, DEADEND, 05 UNITS BROKEN
003 05 Regular 2D02 #2 POSITION, DEADEND, 02 UNITS BROKEN
003 05 Regular 3D03 #3 POSITION, DEADEND, 03 UNITS BROKEN
003 05 Regular 3D02 #3 POSITION, DEADEND, 02 UNITS BROKEN
003 05 Regular 2D02 #2 POSITION, DEADEND, 02 UNITS BROKEN
020 03 Regular HEC HIGH BRUSH, CONIFEROUS VARIETY
024 02 Regular 1V03 #1 POSITION, V-STRING, 03 UNITS BROKEN
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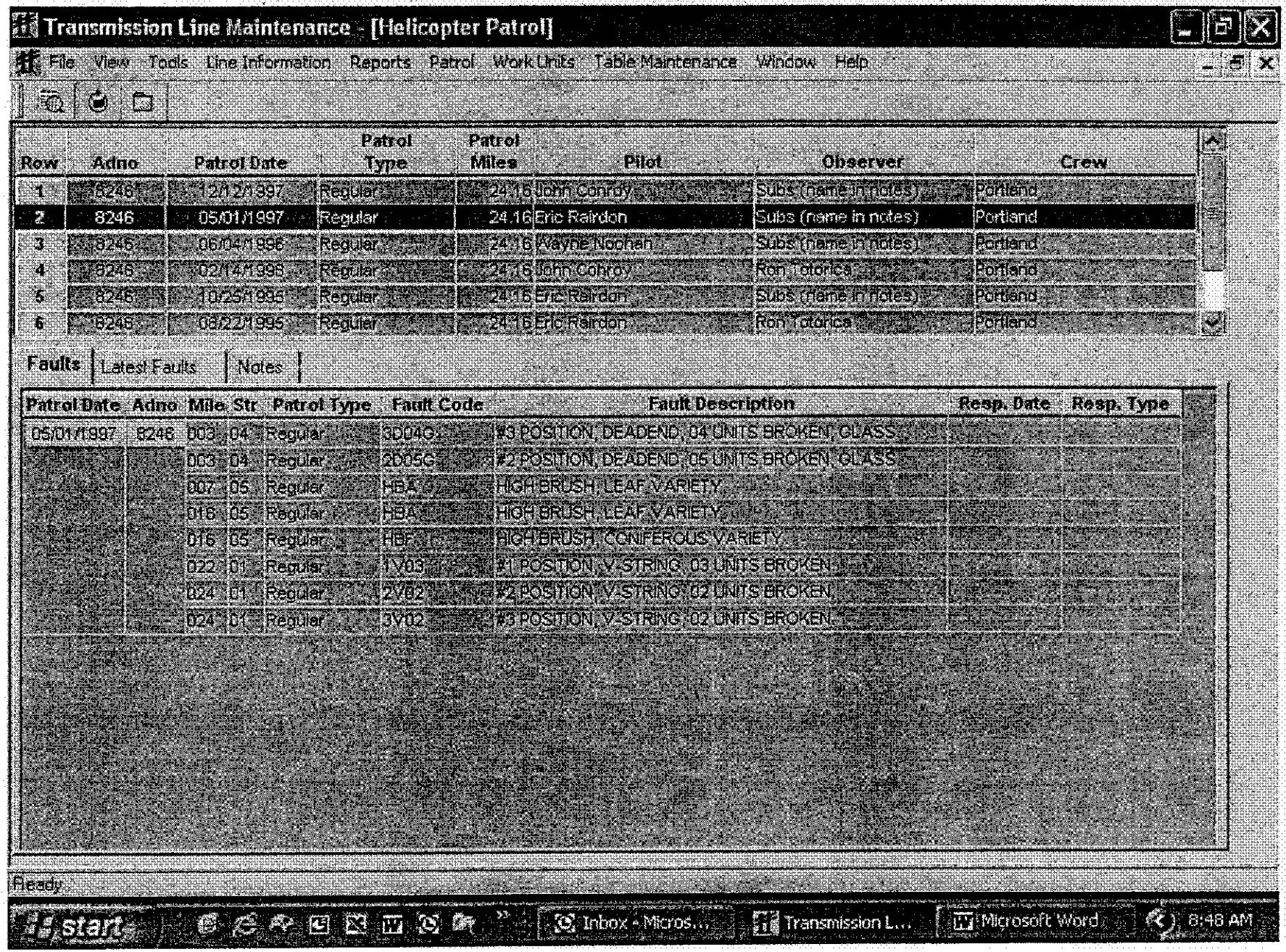
8:48 AM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2 8246 05/01/1997 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
3 8246 06/04/1996 Regular 24.16 Wayne Noonan Subs (name in notes) Portland
4 8246 02/14/1996 Regular 24.16 John Conroy Ron Totorica Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
6 8246 08/22/1995 Regular 24.16 Eric Rairdon Ron Totorica Portland
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
05/01/1997 8246 003 04 Regular 3D04G #3 POSITION, DEADEND, 04 UNITS BROKEN, GLASS
003 04 Regular 2D05G #2 POSITION, DEADEND, 05 UNITS BROKEN, GLASS
007 05 Regular HBA HIGH BRUSH, LEAF VARIETY
016 05 Regular HBA HIGH BRUSH, LEAF VARIETY
016 05 Regular HBF HIGH BRUSH, CONIFEROUS VARIETY
022 01 Regular 1V03 #1 POSITION, V-STRING, 03 UNITS BROKEN
024 01 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
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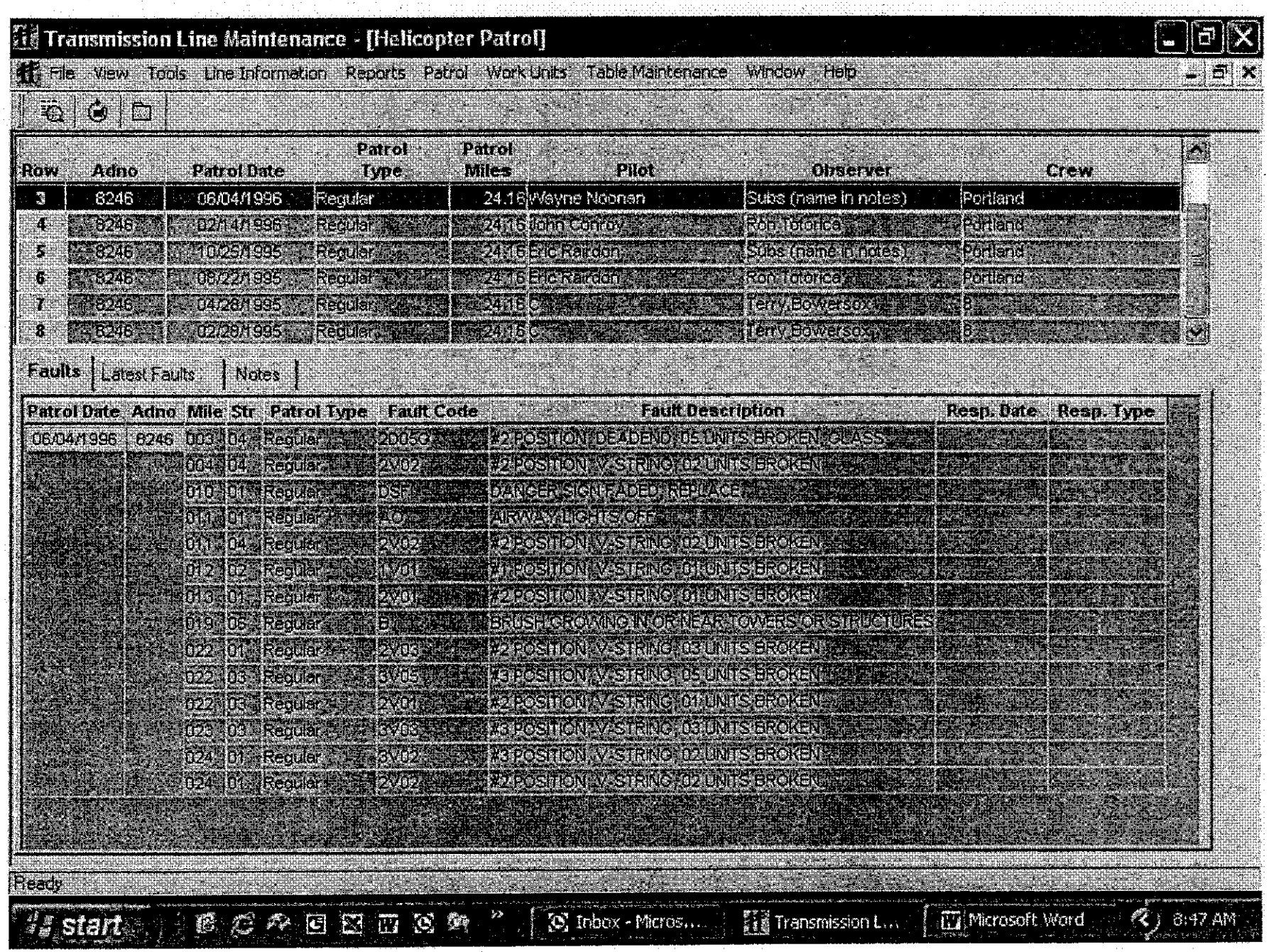
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Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
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4 8246 02/14/1996 Regular 24.16 John Conroy Ron Tolorica Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdan Subs (name in notes) Portland
6 8246 06/22/1995 Regular 24.16 Eric Rairdan Ron Tolorica Portland
7 8246 04/28/1995 Regular 24.16 C Terry Bowersox B
8 8246 02/28/1995 Regular 24.16 C Terry Bowersox B
Faults
Latest Faults
Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
06/04/1996 8246 003 04 Regular 2D05 #2 POSITION, DEADEND, 05 UNITS BROKEN, GLASS
004 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
010 01 Regular DSFD DANGER SIGN FADED, REPLACE
011 01 Regular AOFF AIRWAY LIGHTS OFF
011 04 Regular 2V02 #2 POSITION, V-STRING, 02 UNITS BROKEN
012 02 Regular 1V01 #1 POSITION, V-STRING, 01 UNITS BROKEN
013 01 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
019 06 Regular B BRUSH GROWING IN OR NEAR TOWERS OR STRUCTURES
022 01 Regular 2V03 #2 POSITION, V-STRING, 03 UNITS BROKEN
022 03 Regular 3V05 #3 POSITION, V-STRING, 05 UNITS BROKEN
022 03 Regular 2V01 #2 POSITION, V-STRING, 01 UNITS BROKEN
023 03 Regular 3V03 #3 POSITION, V-STRING, 03 UNITS BROKEN
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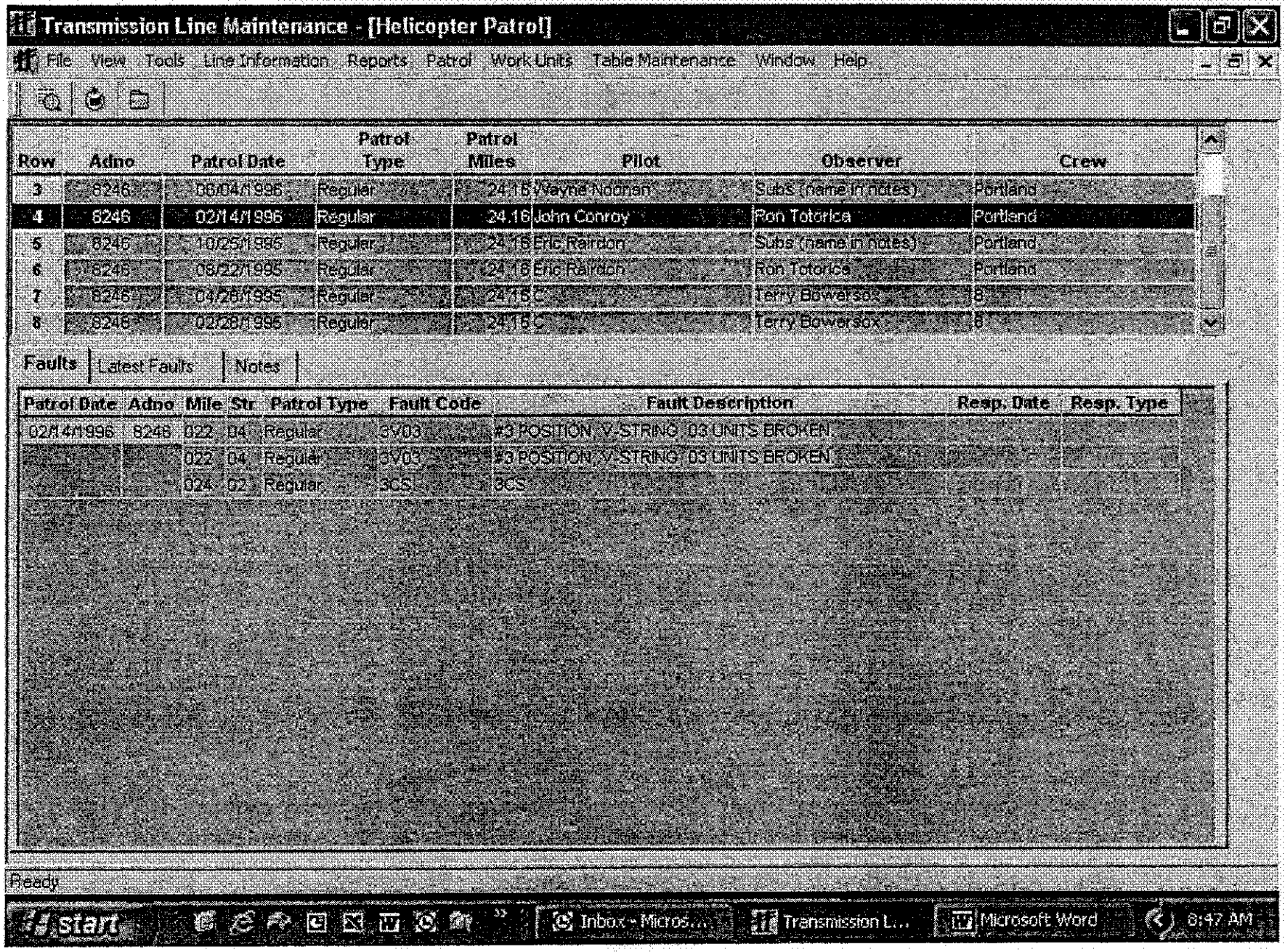
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Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
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4 8246 02/14/1996 Regular 24.16 John Conroy Ron Totorica Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
6 8246 08/22/1995 Regular 24.16 Eric Rairdon Ron Totorica Portland
7 8246 04/26/1995 Regular 24.16 C Terry Bowersox 8
8 8246 02/28/1995 Regular 24.16 C Terry Bowersox 8
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
02/14/1996 8246 022 04 Regular 3V03 #3 POSITION, V-STRING, 03 UNITS BROKEN
022 04 Regular 3V03 #3 POSITION, V-STRING, 03 UNITS BROKEN
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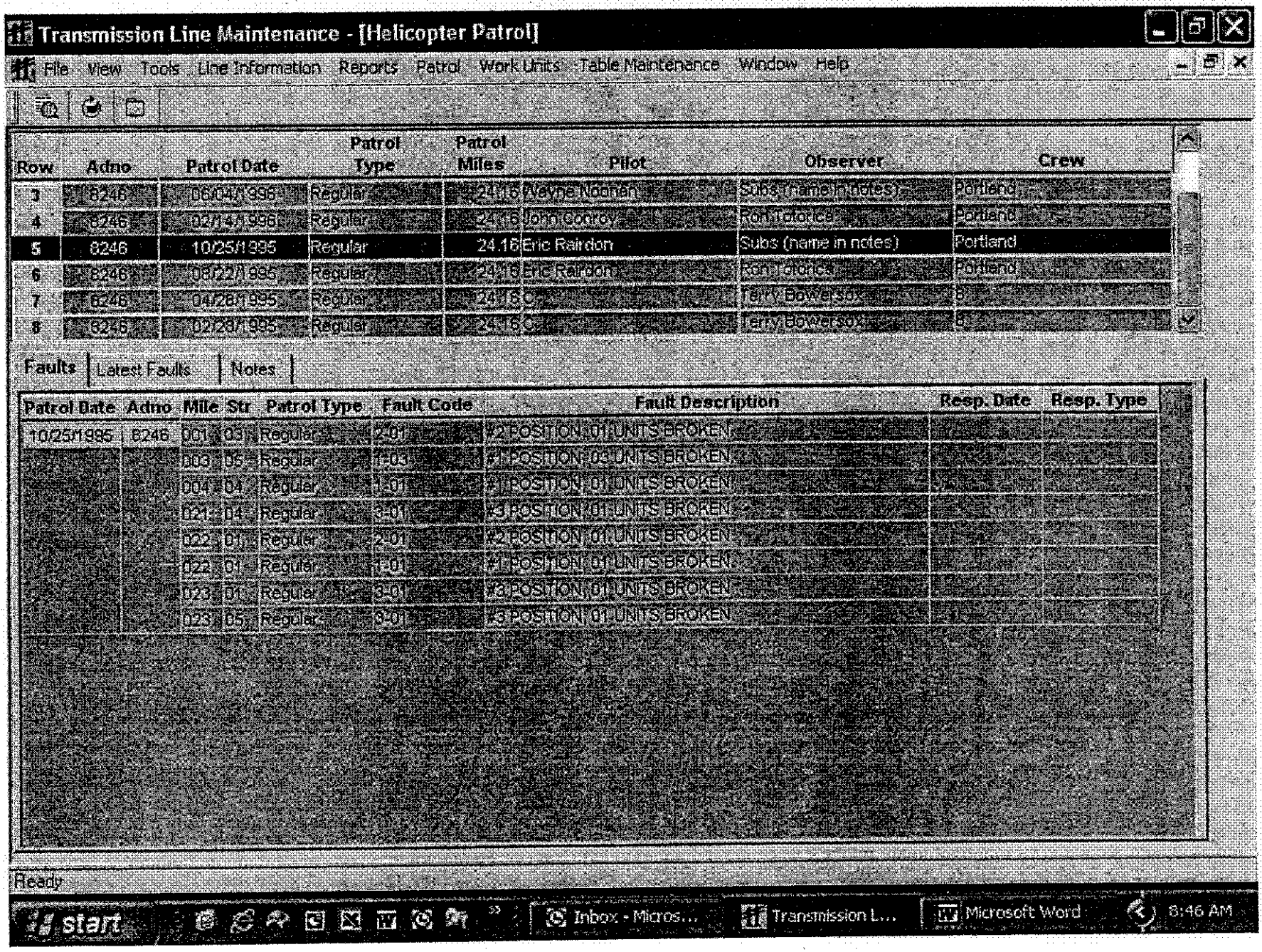
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File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
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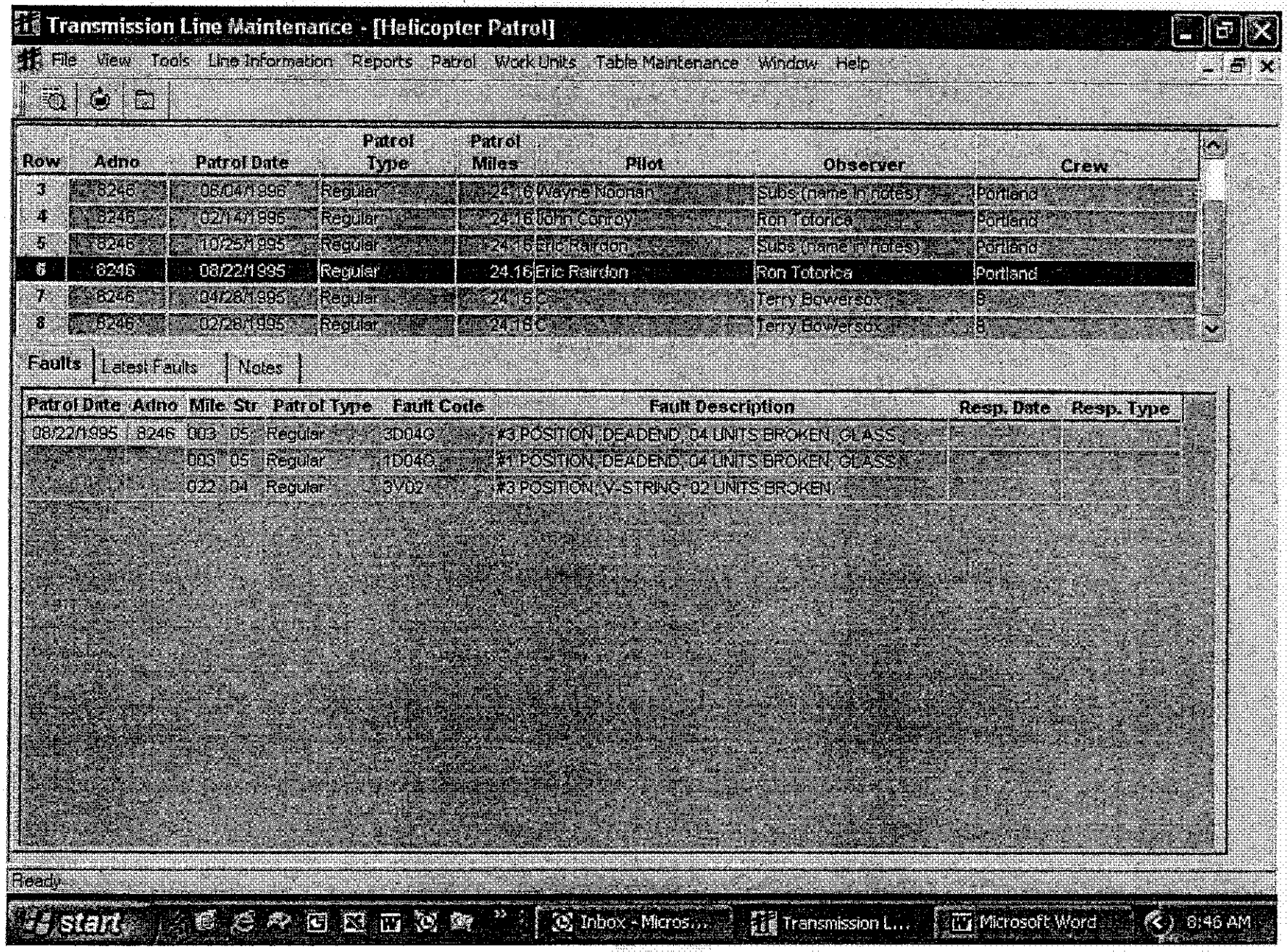
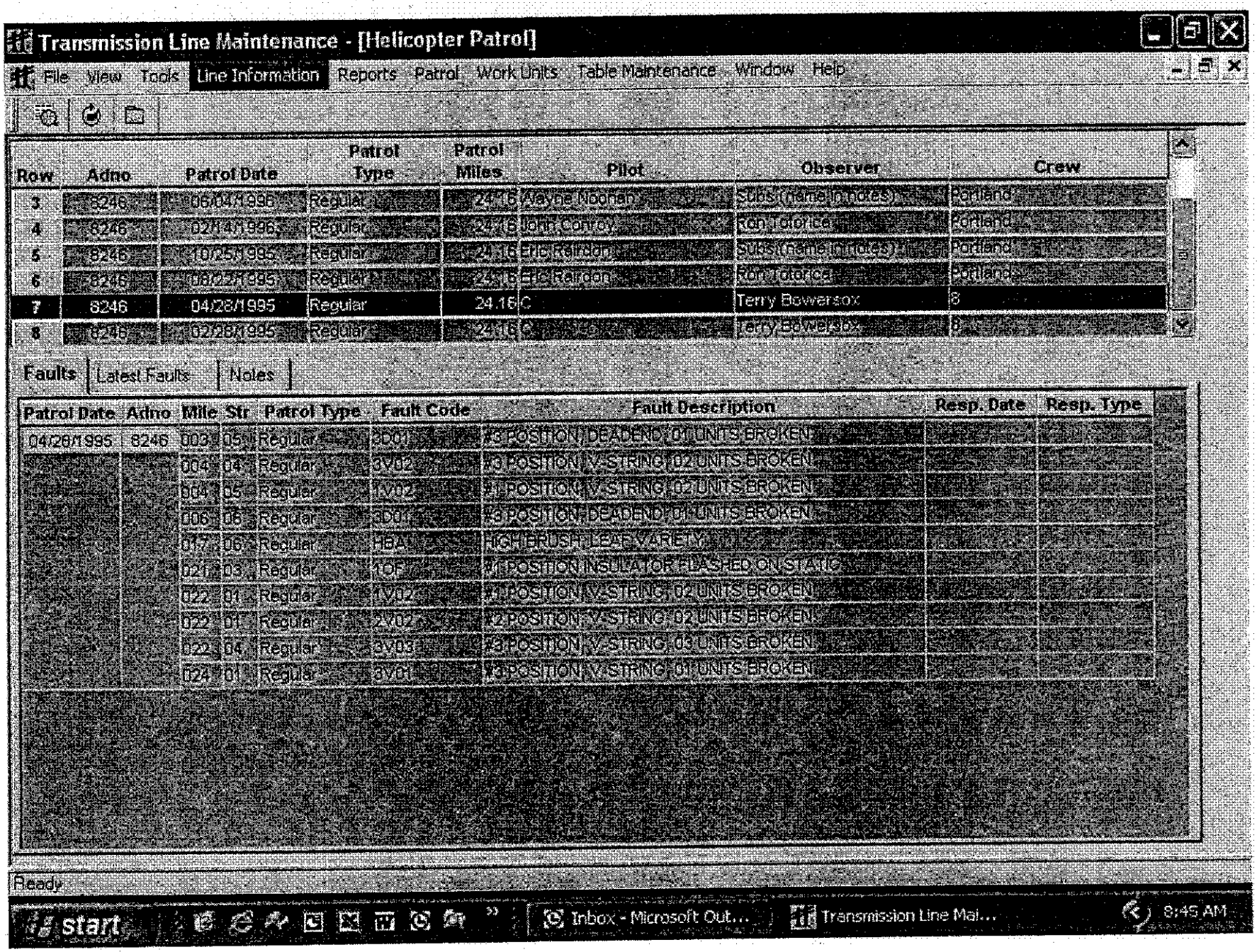
4 8246 02/14/1996 Regular 24.16 John Conroy Ron Tatorice Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
6 8246 08/22/1995 Regular 24.16 Eric Rairdon Ron Tatorice Portland
7 8246 04/28/1995 Regular 24.16 Terry Bowersox
8 8246 02/28/1995 Regular 24.16 Terry Bowersox
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
10/25/1995 8246 001 03 Regular 2-01 #2 POSITION, 01 UNITS BROKEN
003 05 Regular 1-03 #1 POSITION, 03 UNITS BROKEN
004 04 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
021 04 Regular 3-01 #3 POSITION, 01 UNITS BROKEN
022 01 Regular 2-01 #2 POSITION, 01 UNITS BROKEN
022 01 Regular 1-01 #1 POSITION, 01 UNITS BROKEN
023 01 Regular 3-01 #3 POSITION, 01 UNITS BROKEN
023 05 Regular 3-01 #3 POSITION, 01 UNITS BROKEN
Ready
start
Inbox - Micros...
Transmission L...
Microsoft Word
8:46 AM


Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
3 8246 06/04/1996 Regular 24.16 Wayne Noonan Subs (name in notes) Portland
4 8246 02/14/1996 Regular 24.16 John Conroy Ron Totorica Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
6 8246 08/22/1995 Regular 24.16 Eric Rairdon Ron Totorica Portland
7 8246 04/28/1995 Regular 24.16 C Terry Bowersox 8
8 8246 02/28/1995 Regular 24.16 C Terry Bowersox 8
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
08/22/1995 8246 003 05 Regular 3D040 #3 POSITION, DEADEND, 04 UNITS BROKEN, GLASS
003 05 Regular 1D040 #1 POSITION, DEADEND, 04 UNITS BROKEN, GLASS
022 04 Regular 3V02 #3 POSITION, V-STRING, 02 UNITS BROKEN
Ready
start
Inbox - Micros...
Transmission L...
Microsoft Word
8:46 AM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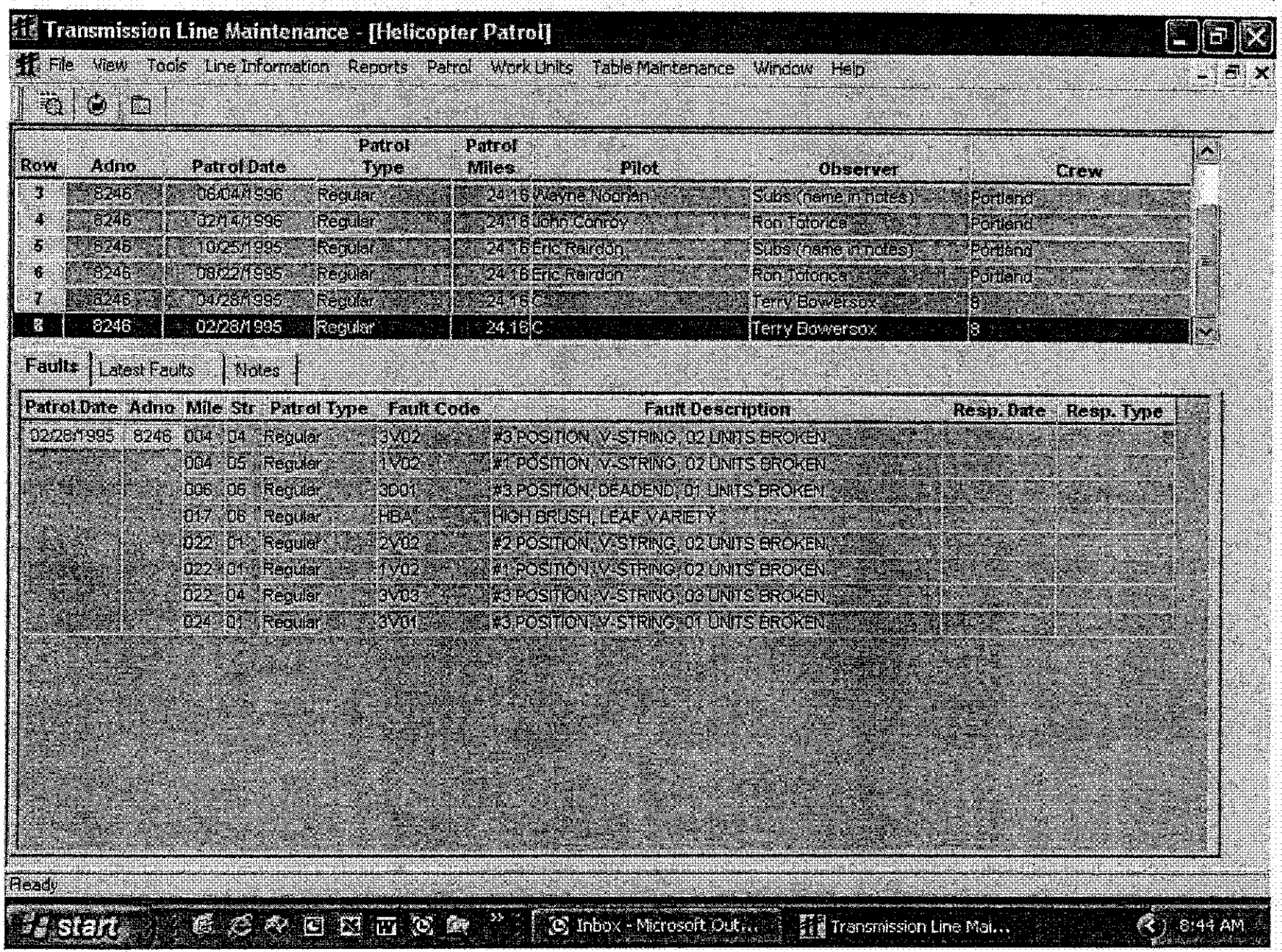
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row Adno Patrol Date Patrol Type Patrol Miles Pilot Observer Crew
3 8246 06/04/1995 Regular 24.16 Wayne Noonan Subs (name in notes) Portland
4 8246 02/14/1995 Regular 24.16 John Conroy Ron Tatorica Portland
5 8246 10/25/1995 Regular 24.16 Eric Rairdon Subs (name in notes) Portland
6 8246 08/22/1995 Regular 24.16 Eric Rairdon Ron Tatorica Portland
7 8246 04/28/1995 Regular 24.16 C Terry Bowersox 8
8 8246 02/28/1995 Regular 24.16 C Terry Bowersox 8
Faults Latest Faults Notes
Patrol Date Adno Mile Str Patrol Type Fault Code Fault Description Resp. Date Resp. Type
04/28/1995 8246 003 05 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
004 04 Regular 3V02 #3 POSITION V-STRING 02 UNITS BROKEN
004 05 Regular 1V02 #1 POSITION V-STRING 02 UNITS BROKEN
006 06 Regular 3D01 #3 POSITION DEADEND 01 UNITS BROKEN
017 06 Regular HBA HIGH BRUSH LEAF VARIETY
021 03 Regular 1OP #1 POSITION INSULATOR FLASHED ON STATIC
022 01 Regular 1V02 #1 POSITION V-STRING 02 UNITS BROKEN
022 01 Regular 2V02 #2 POSITION V-STRING 02 UNITS BROKEN
022 04 Regular 3V03 #3 POSITION V-STRING 03 UNITS BROKEN
024 01 Regular 3V01 #3 POSITION V-STRING 01 UNITS BROKEN
Ready
start
Inbox - Microsoft Out...
Transmission Line Mai...
8:45 AM


Transmission Line Maintenance - [Helicopter Patrol]
File View Tools Line Information Reports Patrol Work Units Table Maintenance Window Help
Row | Adno | Patrol Date | Patrol Type | Patrol Miles | Pilot | Observer | Crew
3 | 8246 | 06/04/1996 | Regular | 24.16 | Wayne Noonan | Subs (name in notes) | Portland
4 | 8246 | 02/14/1996 | Regular | 24.16 | John Conroy | Ron Tafonica | Portland
5 | 8246 | 10/25/1995 | Regular | 24.16 | Eric Rairdon | Subs (name in notes) | Portland
6 | 8246 | 08/22/1995 | Regular | 24.16 | Eric Rairdon | Ron Tafonica | Portland
7 | 8246 | 04/28/1995 | Regular | 24.16 | C | Terry Bowersox | 8
8 | 8246 | 02/28/1995 | Regular | 24.16 | C | Terry Bowersox | 8
Faults | Latest Faults | Notes
Patrol Date | Adno | Mile | Str | Patrol Type | Fault Code | Fault Description | Resp. Date | Resp. Type
02/28/1995 | 8246 | 004 | 04 | Regular | 3V02 | #3 POSITION, V-STRING, 02 UNITS BROKEN
004 | 05 | Regular | 1V02 | #1 POSITION, V-STRING, 02 UNITS BROKEN
006 | 06 | Regular | 3D01 | #3 POSITION, DEADEND, 01 UNITS BROKEN
017 | 06 | Regular | HBA | HIGH BRUSH, LEAF VARIETY
022 | 01 | Regular | 2V02 | #2 POSITION, V-STRING, 02 UNITS BROKEN
022 | 01 | Regular | 1V02 | #1 POSITION, V-STRING, 02 UNITS BROKEN
022 | 04 | Regular | 3V03 | #3 POSITION, V-STRING, 03 UNITS BROKEN
024 | 01 | Regular | 3V01 | #3 POSITION, V-STRING, 01 UNITS BROKEN
Ready
start
Inbox - Microsoft Out...
Transmission Line Mai...
8:44 AM

FOIA Request #05-049

Request Item #4:

Documents pertaining cutting trees or other vegetation within a specific distance or height from the power lines.

- TLM Standards and Guides
  - PT 02 01 93-03 Transmission Line Aircraft Patrol
  - PT 02 02 82-04 Working Patrol
  - PT 07 03 85-03 Danger Tree and Brush Selection Criteria
  - PT 07 05 92-05 Reporting of Encroachments and Hazardous Conditions

TITLE: **TRANSMISSION LINE AIRCRAFT PATROL**			**PT 02 01 93-03**
REVIEWED BY: TLM Tech. Svc APPROVED BY: Mike Staats	SPDS: 10/8/97	DATE: 10/10/04	PAGE: 1 of 10
INDEX KEY WORDS: Aerial Patrol, Inspection, Pilot: responsibilities ADP system			
REFERENCE DOCUMENTS: System Operations "Aerial Transmission Line Patrol Practices"			

I. BACKGROUND

It has been established by operating utilities that regular and thorough line patrols and inspections are essential if a high standard of service is to be maintained. Further, the experience of BPA and others has proven that neither aircraft nor ground patrols should be considered as self-sufficient; they are interdependent and must be used to gain the most effective and economical results. The objective of the routine aircraft patrols is to obtain information on facility conditions, so that necessary maintenance action can be taken to insure a high standard of service on the system. Necessary information on incipient or existing trouble is obtained through observation, infrared scanning, low level video and photography.

II. RESPONSIBILITIES:

A. Responsibilities of Technical Services

Technical Services, Facilities and Lines is responsible for programming, scheduling, and maintaining the records necessary for control and analysis of the aircraft patrols related to maintenance activities. Technical Services, Facilities and Lines prepares ADP reports of patrol findings based on information submitted by the Observers. These reports are transmitted to the TLM District Foremen and other concerned individuals on a weekly basis. These reports are also available on the System Maintenance Information System (SMIS)

Technical Services, Facilities and Lines, with the assistance of Aircraft Services, will assign lines and boundaries normally patrolled by each aircraft patrol crew. As new lines are energized, they will assign the patrol responsibilities to the appropriate crew.

B. Responsibilities of the Aircraft Patrol Crew

Each aircraft patrol crew shall consist of two people – an Observer and a Pilot. The Observer and the Pilot must cooperate closely making the patrol as efficient and safe as possible.

C. Responsibility of the Aircraft Patrol Observer

The Observer is responsible for maintaining the patrol boards in their respective districts. They will use the patrol boards, and input from the pilot, to develop a weekly patrol schedule. The Observer must also maintain contact with the Regional Managers and District Foremen to keep informed of any special considerations or requests they may have regarding lines in their jurisdiction. The weekly patrol schedule will be submitted to the TLM Process Manager and to the Manager of Aircraft Services by Friday of the preceding week.

The Aircraft patrol Observer is responsible for locating faults, observing and noting conditions on BPA transmission line facilities, conditions on or bordering the right-of-way, encroachments, unusual activity on or bordering the right-of-way, and for promptly and correctly reporting his observations. The Observer is also responsible for the operation of the low level video equipment and the operation of and reporting of the heat emission detection equipment which is also referred to as the Forward Looking Infrared Radar or FLIR.

The Patrol Observer is responsible for making the necessary contacts to pass on results of each patrol, if necessary. In addition, he is also responsible for completing and inputting the proper reports in conjunction with the aircraft patrols. Reports must be neat, accurate, and promptly submitted.

D. Responsibility of Aircraft patrol Pilot

The Aircraft Patrol Pilot is responsible for the safe operation of the aircraft and for the safety of his crew and passengers. Pilot shall have the final authority for determining the loading and the mechanical condition of the aircraft. He is also responsible for determining if a particular flight shall be continued or terminated and for determining the route that will be followed when weather or other safety conditions.

The Aircraft Patrol Pilot shall be familiar with the Observer's duties in order to inform temporary Observers in the procedures, reporting, recording, and transcribing of conditions found during the aircraft patrols.

III. PROCEDURE

A. Frequency of Patrol

Normally, all transmission lines will be patrolled at least three times per year on a routine basis.

Routine patrols will be scheduled on all high capacity 500-kV lines prior to the heavy load period so that defects may be repaired when outages are available. Heavy load periods are generally during the spring runoff for the Northwest-Southwest Intertie lines and the winter months for the east-west lines. Lines that mainly serve irrigation are very important in the summer months. Lines that are located in seasonally inaccessible areas such as in high mountains or cropland will be patrolled before the line becomes inaccessible each year.

Each line will be patrolled when practical following an unexplained interruption or when requested by the dispatcher or the TLM District Foreman. These special and other emergency patrols will not be counted in the frequency unless the line is otherwise due for routine patrol, i.e., the line has not been patrolled for more than 2 months.

Patrols on parallel lines in multiple line corridors should be scheduled to provide an even distribution of patrols to insure the maximum coverage of the entire right-of-way, considering efficient utilization of the helicopter and desires of the District Foreman.

B. Patrolling in Noise Sensitive Areas

1. Patrols will be interrupted and detoured around mink farms, turkey farms, and other specially designated areas.

2. Spotted Owl Habitat – when practical, avoid aircraft patrols within 1/4 mile of known Spotted Owl nests during the nesting season (between March 1 and June 30.) When patrols are conducted within 1/4 mile of known nests during the nesting season, care must be taken not to hover, circle, or otherwise linger in the area. The pilot must also attempt to detour the nest site by gaining altitude. A map of all known nest sites within 1/4 mile of BPA lines will be provided to each patrol crew. **Please note, this map is confidential information and distributing the information can lead to severe civil and criminal penalties. In addition, harassing or otherwise disturbing Spotted Owls can also lead to civil and criminal penalties.**

C. Conduct of Patrol

Patrol flights will be conducted at speeds and altitudes that afford the Observer the best opportunity to thoroughly inspect the line and right-of-way and which are commensurate with safe flight practice. Detour signs will be observed. It is important that signs that are no longer meaningful be noted on the report so they can be removed.

The Observer will watch for, and note, the location of conditions affecting line operations such as: Damaged conductor, insulators or structures; high brush or trees; new logging fringes; danger trees; encroachments on the right-of-way, under structures or conductors; etc. All such items should be reported whether previously reported or not. The Observer shall endeavor to determine the seriousness of conditions found, and the corrective action needed, by on-the-spot examination and evaluation. If necessary, he may request the Pilot to **circle, hover, or land** for closer inspection. On-the-spot decisions by the Observer will reduce the need for expensive and time-consuming re-checks by ground patrol.

In those cases where it is difficult to determine the exact number of broken insulators, and the extent of the corrective repair necessary, the Pilot should circle or if necessary, land and the Observer walk in to the structure to make a closer inspection of the damage. This is important to prevent a line crew from traveling a long distance to do hot-line work only to get there and find there are an insufficient number of good insulator units remaining.

D. Safety

SAFETY OF THE CREW AND EQUIPMENT AND OF THE PERSON AND PROPERTY OF OTHERS SHALL AT ALL TIMES BE CONSIDERED PARAMOUNT OVER ALL OTHER FLIGHT OBJECTIVES.

The Pilot has final responsibility for safety. He has the authority to cancel or modify any flight because of adverse weather conditions or unairworthiness of aircraft. The Observer shall inform the Pilot of hazardous conditions known to him.

E. Vegetation on Right-of-Way

When reporting on right-of-way trees that pose a hazard to the line the following criteria should be used when possible:

RIGHT-OF-WAY MAINTENANCE CRITERIA FOR TREE CLEARANCE

DANGER BRUSH * (CORRECT IMMEDIATELY)		**HIGH BRUSH** (CORRECT WITHIN THE GROWING SEASON)	
Voltage (kV)	**Vertical Clearance (FT)**	**Voltage (kV)**	**Vertical Clearance (FT)**
115 & Below	9 or less	115 & Below	16 or less
230	10 or less	230	17 or less
345	12 or less	345	20 or less
500	14 or less	500	25 or less

* All reports of Danger Brush will be investigated by the appropriate line crew within 24 hours of being reported. This is a commitment BPA has made to the Secretary of Energy.

All danger brush must also be reported to the District Foreman by phone, radio, or in person the day it is discovered. Any burnt tops must be reported to the Foreman and the Dispatcher immediately.

In addition, the following graph may be used to help determine conductor sag for danger brush determination. This represents what can be expected on typical steel and wood lines as the conductor goes from a lightly loaded condition to a fully loaded condition.

Sags for Danger Brush Determination

Sags and differential sags are intended to aid in identifying danger Brush for cutting.

Lattice Steel Construction Chukar Conductor MWT=19000# @ 0.5-8-0				**Wood Pole Construction Narcissus Conductor** MWT=8000# @ 0.5-8-0			
Span Length	**Sag @ 100°C Conductor Temp.**	**Sag @ 0°C Conductor Temp.**	**Change in Sag**	**Span Length**	**Sag @ 100°C Conductor Temp.**	**Sag @ 0°C Conductor Temp.**	**Change in Sag**
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1200	47.2	34.7	12.5	600	23.0	15.2	7.8
1350	58.4	44.5	12.9	750	32.5	24.1	8.4
1500	68.7	55.4	13.3	900	43.9	35.1	8.7
1650	81.2	67.6	13.6	1050	57.3	48.3	9.0
1800	94.8	81.0	13.8	1200	72.9	63.7	9.2
1950	109.7	95.7	14.0				
2100	125.9	111.7	14.2				

The sags assume a level span with the conductor and design tensions as shown.

F. Reporting

The Aircraft Patrol Report is the end product of the aircraft patrol activity. Earnest diligence is required of everyone concerned with its production to insure its accuracy and maximum use. The Observers are to correctly and legibly complete a aircraft patrol worksheet for each line patrolled. A separate sheet will be used when the ADNO number changes.

All hazardous system conditions will be reported immediately by calling the Dispatcher, the District Foreman, and/or the Regional Manager. If the District Foreman cannot be reached directly word should be left for them at their respective offices. The name or position of person contacted is to be reported as a note on the worksheet. (See Transmission Maintenance Procedure PT 02 03, "Uniform Reporting and Handling of Hazardous Conditions on the Transmission System".)

The Aircraft patrol worksheet heading will be completed with the Date of Patrol (YYMODA), Pilot and Observer Code, Patrol Type Code, and the actual miles patrolled (If less than a full line.) All fault notations, remarks, and coding are to be in **red pencil. The fault codes are listed on Attachment I.**

Notes are to be handled as follows: Draw a red circle around the structure number needing a footnote. Footnotes will first show structure number, followed by brief longhand notes with an explanation to describe situations not covered by the standard codes, to explain reasons for skipping structures or line sections and for all situations where immediate action is needed.

Only red pencil notations and remarks will be processed. Long-hand footnotes will be copied verbatim. The final aircraft patrol report will be a computer printout. All faults found involving broken units use a 2-digit code. Coding must show two places: -01, -05, -09, -14, etc.

The Observer's will input the data from their hand written worksheets into the SMIS system by the end of each week. Following data input, a Weekly Aircraft Patrol Report is generated and distributed by Technical Services, Facilities and Lines. Copies of the Weekly Aircraft Patrol reports for each individual District will be sent to the Observers.

Following data input from Observer's, a Weekly Aircraft Patrol Report is generated and distributed by Technical Services, Facilities and Lines, one full set to the Process Managers and Aircraft Services Manager, the Foreman III of each District receives a copy of his District Patrolled that week and copy also goes to the Resource Manager in the Region and a file copy for TLM. There is a Monthly Helicopter Report generated the first of each month and a copy of it goes to each of the Natural Resource Managers of their Region and a file copy for TLM. Each quarter there is a Frequency Report generated, one copy goes to the Manager, Aircraft Services, each Observer and a file copy for TLM.

Aircraft patrol worksheets have been supplied to each Observer covering lines assigned to him. Most of these sheets have been put into the computer and are maintained by the Observer. As a patrol proceeds, the Observer will mark the worksheet blocks corresponding to the individual structures inspected, using the standard aircraft patrol worksheet fault codes. This extensive listing is furnished by TLM (See attached.)

Michael L. Staats, Manager
Transmission Line Maitenance

Attachment I

FAULT CODE	FAULT-DESC	FAULT CODE	FAULT-DESC
	INSULATORS		
1-*	#1 POSITION, __ UNITS BROKEN.	2SB	#2 POSITION STRUT INSULATOR BROKEN.
2-*	#2 POSITION, __ UNITS BROKEN.	3SB	#3 POSITION STRUT INSULATOR BROKEN.
3-*	#3 POSITION, __ UNITS BROKEN.	1PB	#1 POSITION POST INSULATOR BROKEN.
1J*	#1 POSITION, JUMPER,__ UNITS BROKEN.	2PB	#2 POSITION POST INSULATOR BROKEN.
2J*	#2 POSITION, JUMPER, __ UNITS BROKEN.	3PB	#3 POSITION POST INSULATOR BROKEN.
3J*	#3 POSITION, JUMPER, __ UNITS BROKEN.	1P	#1 POSITION INSULATORS OUT OF PLUMB.
1D*	#1 POSITION, DEADEND, __ UNITS BROKEN.	2P	#2 POSITION INSULATORS OUT OF PLUMB.
2D*	#2 POSITION, DEADEND, __ UNITS BROKEN.	3P	#3 POSITION INSULATORS OUT OF PLUMB.
3D*	#3 POSITION, DEADEND, __1 UNITS BROKEN.	CII	CONTAMINATED INSULATORS, INDUSTRIAL CONTAMINATION.
1V*	#1 POSITION, V-STRING, __ UNITS BROKEN.	CIA	CONTAMINATED INSULATORS DUE TO ASH
2V*	#2 POSITION, V-STRING, __ UNITS BROKEN.	C	CAR IN RIGHT OF WAY
3V*	#3 POSITION, V-STRING, __ UNITS BROKEN.	LG	LOGGING IN RIGHT OF WAY.
1F	#1 POSITION FLASHED.	L	LOGS DECKED IN RIGHT OF WAY.
2F	#2 POSITION FLASHED.	G	GARBAGE AND DEBRIS IN RIGHT OF WAY.
3F	#3 POSITION FLASHED.	HS	HAYSTACK IN RIGHT OF WAY.
1JF	#1 POSITION JUMPER FLASHED.	OA	OLD X-ARMS IN RIGHT OF WAY.
2JF	#2 POSITION JUMPER FLASHED.	OP	OLD POLES IN RIGHT OF WAY.
3JF	#3 POSITION JUMPER FLASHED.	OL	OLD LUMBER IN RIGHT OF WAY.
1DF	#1 POSITION DEADEND FLASHED.	ENC	ENCROACHMENT, SEE COMMENT.
2DF	#2 POSITION DEADEND FLASHED.	OC	OLD CULVERT IN RIGHT OF WAY
3DF	#3 POSITION DEADEND FLASHED.		**WOOD POLE**
1-*G	#1 POSITION, __ UNITS BROKEN, GLASS.	AD	A POLE DAMAGED, SEE COMMENT.
2-*G	#2 POSITION, __ UNITS BROKEN, GLASS.	BD	B POLE DAMAGED, SEE COMMENT.
3-*G	#3 POSITION, __ UNITS BROKEN, GLASS.	CD	C POLE DAMAGED, SEE COMMENT.

1-*P	#1 POSITION, __ UNITS BROKEN, PYREX.		**X-ARM**
2-*P	#2 POSITION, __ UNITS BROKEN, PYREX.	XD	X-ARM DAMAGED, SEE COMMENT.
3*P	#3 POSITION, __1 UNITS BROKEN, PYREX.		**X-BRACES**
1J*G	#1 POSITION, JUMPER, __ UNITS BROKEN, GLASS.	XXD	X-BRACE DAMAGED, SEE COMMENT.
2J*G	#2 POSITION, JUMPER, __ UNITS BROKEN, GLASS.		**CONDUCTOR**
3J*G	#3 POSITION, JUMPER, __ UNITS BROKEN, GLASS.	1DC	#1 CONDUCTOR DAMAGED, SEE COMMENT
1D*G	#1 POSITION, DEADEND, __ UNITS BROKEN, GLASS.	2DC	#2 DAMAGED CONDUCTOR, SEE COMMENTS
2D*G	#2 POSITION, DEADEND, __ UNITS BROKEN, GLASS.	3DC	#3 DAMAGED CONDUCTOR, SEE COMMENT
3D*G	#3 POSITION, DEADEND, __ UNITS BROKEN, GLASS.		**CONDUCTOR HARDWARE**
1J*P	#1 POSITION, JUMPER, __ UNITS BROKEN, PYREX.	1SP	#1 POSITION, SPACER FAILED.
2J*P	#2 POSITION, JUMPER, __ UNITS BROKEN, PYREX.	2SP	#2 POSITION, SPACER FAILED.
3J*P	#3 POSITION, JUMPER, __ UNITS BROKEN, PYREX.	3SP	#3 POSITION, SPACER FAILED.
1D*P	#1 POSITION, DEADEND, __ UNITS BROKEN, PYREX.	VF*	**CONDUCTOR VIBRATION DAMPER FAILURE, * TOTAL FAILED**
2D*P	#2 POSITION, DEADEND, __ UNITS BROKEN, PYREX.		* Total number of dampers failed on tower or structure, two digit
3D*P	#3 POSITION, DEADEND,__ UNITS BROKEN, PYREX.		**OVERHEAD GROUND**
1V*G	#1 POSITION, V-STRING, __ UNITS BROKEN, GLASS.	OVF	VIBRATION DAMPER FAILURE ON STATIC.
2V*G	#2 POSITION, V-STRING,__ UNITS BROKEN, GLASS.	1OVF	#1 POSITION VIBRATION DAMPER FAILURE ON STATIC.
3V*G	#3 POSITION, V-STRING, * UNITS BROKEN, GLASS.	2OVF	#2 POSITION VIBRATION DAMPER FAILURE ON STATIC.
1VJF	#1 POSITION, V-STRING JUMPER FLASHED	1OB	#1 POSITION INSULATOR BROKEN ON STATIC.
2VJF	#2 POSITION, V-STRING JUMPER FLASHED	2OB	#2 POSITION INSULATOR BROKEN ON STATIC.
3VJF	#3 POSITION, V-STRING JUMPER FLASHED	1OBG	#1 POSITION INSULATOR BROKEN ON STATIC, GLASS.
1VF	#1 POSITION, V-STRING FLASHED	2OBG	#2 POSITION INSULATOR BROKEN ON STATIC, GLASS.
2VF	#2 POSITION, V-STRING FLASHED	1OF	#1 POSITION INSULATOR FLASHED ON STATIC.
3VF	#3 POSITION, V-STRING FLASHED	2OF	#2 POSITION INSULATOR FLASHED ON STATIC.
CI	CONTAMINATED INSULATORS, BIRD SMEARS	P	STATIC OUT OF PLUMB.
CIV	CONTAMINATED INSULATORS, V-STRING, BIRD SMEARS.	MBF	MARKER BALL FADED, REPLACE
1SB	#1 POSITION STRUT INSULATOR BROKEN.		

	OVERHEAD GROUND (Continued)		MISC. DEFECTS & CONDITIONS
2D0B	#2 POSITION, OVERHEAD GROUND DEADEND INSULATOR BROKEN	DSB	DIVERTER STICK BROKEN.
1OCI	#1 POS. OHGW CONTAMINATED INSULATOR, BIRD SMEARS	N	NEST.
2OCI	#2 POS. OHGW CONTAMINATED INSULATOR, BIRD SMEARS	FB	FIELD BURNED.
1D0F	#1 POSITION, OVERHEAD GROUND DEADEND FLASHED.	LS GL	LOOSE STEEL GUY LOOSE
2D0F	#2 POSITION, OVERHEAD GROUND DEADEND FLASHED.	FT	FLASHOVER INDICATOR TARGETS DOWN
1DOF	#1 POSITION, OHG DEADEND INSULATOR FLASHED	NP	NOT PATROLLED DUE TO HAZARDOUS CROSSING OVER OUR LINES.
2DOF	#2 POSITION, OHG DEADEND INSULATOR FLASHED.	RC	ROAD CLOSED
1DOB	#1 POSITION, OHG DEADEND INSULATOR BROKEN	ART	A POLE ROTTEN TOP.
MBS	MARKER BALL SPLIT.OR DAMAGED.	BRT	B POLE ROTTEN TOP.
	SIGN	CRT	C POLE ROTTEN TOP.
DSF	DANGER SIGN FADED, REPLACE.	BTP	BURNT TOP
DSD	DANGER SIGN DAMAGED, REPLACE.	CLC	CRITICAL LINE CROSSING
DSL	DANGER SIGN LOOSE, REPAIR.	IDS	INSTALL STRUCTURE IDENTIFICAT SIGN
DSIA	INSTALL DANGER SIGN, FACE AHEAD ON LINE.	NPC	NOT PATROLLED CLOSELY
DSIB	INSTALL DANGER SIGN, FACE BACK ON LINE.	RH	RUSTY HARDWARE
DSR	REMOVE DANGER SIGN.	RT	RUSTY TOWER
DSSF	DANGER STATIC SIGN FADED, REPLACE.	TB	TUBULAR STEEL POLE OUT OF PLUMB.
DSSD	DANGER STATIC SIGN DAMAGED, REPLACE.	RB	ROAD BLOCKED.
DSSL	DANGER STATIC SIGN LOOSE, REPAIR.	RW	ROAD WASHED OUT.
DSSIA	INSTALL DANGER STATIC SIGN, FACE AHEAD ON LINE.	CS	CULVERT STOPPED-UP
DSSIB	INSTALL DANGER STATIC SIGN, FACE BACK ON LINE.	CW	CULVERT WASHED OUT.
MSF	MILE SIGN FADED, REPLACE.	CWF	CULVERT EXPOSED, NEEDS BACKFILL.
MSS	SMALL AERIAL MILE SIGNS.	B	BRUSH GROWING IN OR NEAR TOWERS OR STRUCTURES
MSL	MILE SIGN LOOSE, REPAIR.	R	ROAD NEEDS CAT WORK
MSI	INSTALL AERIAL MILE SIGNS.	BSR	BRUSH STACKED IN RIGHT-OF-WAY
MSR	REMOVE AERIAL MILE SIGNS.	AO	AIRWAY LIGHTS OFF

DSSR	REMOVE DANGER STATIC SIGNS.		**BRUSH & TREES, RIGHT-OF-WAY**
ASF	AIRPORT SIGN FADED, REPLACE.	HBA	HIGH BRUSH, LEAF VARIETY.
ASD	AIRPORT SIGN DAMAGED, REPLACE.	HBF	HIGH BRUSH, CONIFEROUS VARIETY.
ASL	AIRPORT SIGN LOOSE, REPAIR.	HBJ	HIGH BRUSH, JUNIPER
ASIA	INSTALL AIRPORT SIGN, FACE AHEAD ON LINE.	DBA	DANGER BRUSH, LEAF VARIETY.
ASIB	INSTALL AIRPORT SIGN, FACE BACK ON LINE.	DBF	DANGER BRUSH, CONIFEROUS.
ASR	REMOVE AIRPORT SIGN.	DBJ	DANGER BRUSH, JUNIPER
DAL	INSTALL DETOUR SIGN, AHEAD ON LINE	DTA	DANGER TREE, LEAF VARIETY.
DBR	INSTALL DETOUR SIGN, BACK ON LINE	DTF	DANGER TREE, CONIFEROUS.
DTSR	REMOVE DETOUR SIGN	DTJ	DANGER TREE, JUNIPER
		S	SLIDE, ROAD BLOCKED.

TITLE: **WORKING PATROL**			**PT 02 02 82-04**
REVIEWED BY: TLM Tech. Svc APPROVED BY: Mike Staats	SPDS: 3/22/00	DATE: 8/27/04	PAGE: 1 of 8
INDEX KEY WORDS: Patrol working			
REFERENCE DOCUMENTS:			

I. BACKGROUND

Working patrols are necessary to gather information to ensure the integrity of BPA's Transmission Line System. The information accumulated is needed for planning and scheduling future maintenance work so defects can be corrected before major faults occur. It is valuable in acquainting personnel with access to the transmission lines in case of emergency or routine maintenance. The working patrol is essential along with the helicopter patrol because it is difficult and sometimes impossible for the helicopter observer to evaluate all conditions of the structures, rights of way, access roads, and brush to conductor clearances.

II. POLICY

The TLM Line Crew is ultimately responsible for identifying and correcting problems on the transmission lines and right-of-ways.

A. Frequency

Generally all lines will be patrolled once a year. A modified frequency can be established by the Regional Manager with input from the District Foreman based on line conditions, operation of considerations and prioritization for system reliability (e.g., line sections with low maintenance history – such as for malicious damage, vegetation maintenance, encroachments, -- may be patrolled less frequently.)

Generally, corridors may be patrolled once per year.

Lines that are not patrolled by helicopter should be patrolled three times per year, or radial lines may require additional working patrols at the discretion of the Region.

High density urban areas that are **not** patrolled by helicopters due to flying restriction, will be patrolled by a working patrol three times a year to maintain the right-of-way and check for encroachments.

B. Organization

Two people will work together, one as an observer and the other as a driver of the patrol vehicle.

Where the facility is accessible by vehicle the observer will get out of the vehicle and make the inspection. When not accessible by vehicle the observer shall make the patrol on foot. In this situation, a portable two way radio should be carried by the observer. When using ATV's for patrol, use two observers and a portable radio for safety.

C. Equipment and tools

Each patrol crew shall be equipped with the necessary tools and equipment to perform work and ensure safety and fire suppression. Consider winter survival, forest service required tools, etc.

D. Type of work to be done during patrols:

As a general rule, any work that can be done within two man-hours should be accomplished while on working patrol. This eliminates the need to send somebody back out to the location later, and keep the roads, right-of-ways, and lines in a decent state of repair.

- Remove fallen trees or brush obstructing the access roads.
- Remove imminent hazardous danger trees. (Refer to Procedures outlined in the Reporting of Encroachments and Hazardous Conditions SPIF)
- Remove danger brush under the conductor. (Per criteria in Figure 1)
- Remove boulders from access roads.
- Erect or replace access road signs.
- Replace missing tower or structure numbers--renumber when identity of line is being changed.
- Clean out debris from bridges and culverts, including open top culverts and cross drains.
- Open drainage ditches.
- Repair gates and fences.
- Conduct ground line heart rot and climbing inspections as scheduled in the TLM Application.
- Backfill or remove excess dirt around wood pole structures.
- Tighten guys.
- Sound and drill poles, as per maintenance schedule. Carry proper plugs to fill any holes drilled, i.e., mitce, etc.
- Remove flammable debris from the base of wood poles.
- Sterilize soil around base of poles when programmed.
- Other miscellaneous duties which consume comparatively little time and can be done by a crew of two.

E. Inspection: Inspect for and record conditions on TLM Working Patrol Report form (BPA F6530.07) or pen based computer as follows.

1. General

- Right-of-way encroachment, buildings, signs, antennas, etc.
- Unauthorized use of access roads, bridges.
- Activity on or near right-of-way which could prove harmful to BPA facilities, (blasting, logging, and irrigation.)
- Height of Christmas, ornamental, and orchard trees which are permitted on right-of-way.
- New roads to or on right-of-way.
- New locked gates across roads.
- Condition of Fiber Optic and Accessories.
- New power line, pipe line, telephone line, constructed on or across right-of-way.
- Erosion or ground movement on the ROW or in the vicinity of structures.

2. Steel Towers

- Conduct climbing inspections as scheduled in TLM Application
- Correcting or reporting the following
  1) Loose, bent, broken steel.
  2) Missing bolts, nuts, and palnuts.
  3) Rusted steel. (Make special inspection of steel where it enters ground or concrete.)
  4) Deteriorating concrete
  5) Step bolts – loose or missing.
  6) Loose guys.
  7) Misalignment or leaning towers. (Slide areas)
  8) Backfill – too much or too little. Make a special note of structure where the dirt is piled higher than the concrete footings.
  9) Bird nests in tower.
  10) Miscellaneous, condition of tower signs, etc.

3. Wood Pole Structures
   - Split poles where white wood showing in full length treated poles.
   - Pole damage such as bird, animal, insect.
   - Fire or lightning damage.
   - Dirt over butt treated area or over through drilled area.
   - Needs backfill.
   - Loose guys.
   - Guy breakers.
   - Misalignment, what degree and direction.
   - Cross braces.
   - Crossarms, split, sagging, warped.
   - Miscellaneous, structure numbers, etc.

4. Airway Marking and Lighting
   - Paint condition.
   - Are lights working.
   - BPA service lines. (Check for same items as transmission lines)

5. Conductor and Accessories
   - Conductor clearance, note spans where it appears that there is impaired clearance between conductor and ground line, conductor and overhead ground wire, conductor and other utility crossings, fiber optic cable, and side clearance under high wind conditions
   - Jumper clearance, note structures where jumpers appear too close to structures and guys. Check for burned spots.
   - Check conductor for broken strands. (Special attention shall be paid where blasting has occurred, heavy ice load existed, and in areas of insulator damage by gun fire.)
   - Spacers.
   - Spacer dampers.
   - Grading rings.
   - Dampers.
   - Counter poise.
   - Insulators, broken, flashed, contaminated.
   - Any irregularity.
   - Check mechanical connection of ground wire at locations where it is grounded to the tower.

6. Right-of-Way

   - Eroding stream banks near structures.
   - Slides, earth movement.
   - Danger trees such as hazard, snag, leaning, type, size, number
   - Danger brush.
   - New crop detrimental to BPA operation , facility and access.
   - Erosion, gullying.

7. Roads, Bridges, Culverts, Gates, Fences

   - Condition of road.
   - Culverts.
   - Bridges, planking, abutments, guard rails.
   - Surfacing, only if previously surfaced.
   - Cross drains.
   - Drainage ditches.
   - Berms on shoulder.
   - Erosion of road banks.
   - Gates, note type and dimensions if replacement required.
   - Fences.
   - Cattle guards.
   - Water bars

F. Reporting

1. Imminently hazardous conditions shall be reported immediately, to the Regional Manager and the District Foreman.

2. Either a transmission line maintenance working patrol report form (BPAF6530.07) or a pin based computer report shall be used by the crew on each transmission line each day a working patrol is performed. Both reports have areas for recording the most common conditions. Other items and the work performed should be shown in the proper area.

3. In recording conditions the degree of damage or harmful situation should be adequately described. For example, under the "Crossarm Defect" column, a split crossarm will be noted by the code symbol "S", but under the "Remarks" column the length and position of the split in the crossarm should be described.

4. An incomplete description may require another trip to assess the condition, or an emergency may occur if a potentially serious condition is not adequately reported.

5. Each structure inspected shall be listed in the "From" column under "Str. No.".

6. For identifying the location of right-of-way or facility conditions between structures, show the beginning structure in the column "From" and the end structure in column headed "To". For identifying an access road not on the right-of-way use the "Remarks" column and road identification number.

   When reporting on right-of-way trees that pose a hazard to the line the following criteria should be used. The actual conductor to brush clearance and brush species should be recorded for high brush and all danger brush not removed.

RIGHT-OF-WAY MAINTENANCE CRITERIA FOR TREE CLEARANCE

DANGER BRUSH * (CORRECT IMMEDIATELY)		**HIGH BRUSH** (CORRECT WITHIN THE GROWING SEASON)	
Voltage (kV)	**Vertical Clearance (FT)**	**Voltage (kV)**	**Vertical Clearance (FT)**
115 & Below	9 or less	115 & Below	16 or less
230	10 or less	230	17 or less
345	12 or less	345	20 or less
500	14 or less	500	25 or less

* All observed Danger Brush should be removed by the patrol crew while they are on site, or scheduled for removal within the immediate future.

In addition the following graph may be used to determine sags for danger brush identification. In special cases, actual sags for specific spans can be obtained from Technical Services, Lines and Facilities.

Sags for Danger Brush Determination

Sags and differential sags are intended to aid in identifying danger Brush for cutting.

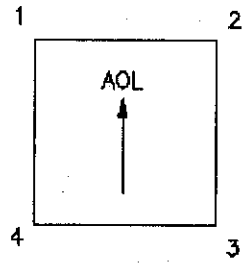
Lattice Steel Construction Chukar Conductor MWT=19000# @ 0.5-8-0				**Wood Pole Construction Narcissus Conductor** MWT=8000# @ 0.5-8-0			
Span Length	**Sag @ 100°C Conductor Temp.**	**Sag @ 0°C Conductor Temp.**	**Change in Sag**	**Span Length**	**Sag @ 100°C Conductor Temp.**	**Sag @ 0°C Conductor Temp.**	**Change in Sag**
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1200	47.2	34.7	12.5	600	23.0	15.2	7.8
1350	58.4	44.5	12.9	750	32.5	24.1	8.4
1500	68.7	55.4	13.3	900	43.9	35.1	8.7
1650	81.2	67.6	13.6	1050	57.3	48.3	9.0
1800	94.8	81.0	13.8	1200	72.9	63.7	9.2
1950	109.7	95.7	14.0				
2100	125.9	111.7	14.2				

The sags assume a level span with the conductor and design tensions as shown.

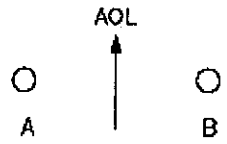
G. Public relations

1. Leave gates open or closed as found. Do not drive over crops on the right-of-way. Contact the owner for permission to use alternate route if one exists.
2. Be courteous to the public and record property owner requests and complaints.
3. When it is necessary to drive through private property, secure permission first whenever possible.

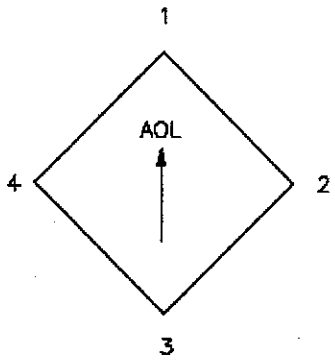
Michael L. Staats, Manager
Transmission Line Maintenance



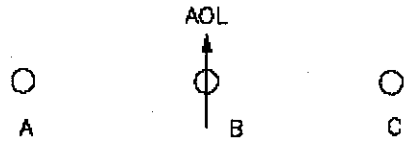
CONVENTIONAL TOWER



2 POLE H-FRAME



ROTATED BASE TOWER



3 POLE H-FRAME

LATTICE TOWERS

H-FRAME STRUCTURES

TOWER LEG / POLE
POSITION IDENTIFICATION
FOR LATTICE TOWERS
AND H-FRAME STRUCTURES

TITLE: **DANGER TREE AND BRUSH SELECTION CRITERIA**			**P T 07 03 85-03**
REVIEWED BY: TLM Tech. Svc APPROVED BY: Mike Staats	SPDS: 12/6/96	DATE: 9/30/04	PAGE: 1 of 8
INDEX KEY WORDS:			
REFERENCE DOCUMENTS:			

I. BACKGROUND

The danger tree and danger brush selection and removal policies are aimed at achieving optimum service reliability, economy, environmental protection, and public acceptance. BPA's vegetation control criteria is believed to provide the best combination of all four.

II. DEFINITIONS

Danger Tree - Any tree growing adjacent to and outside of the transmission line right-of-way which is a present or future hazard to the transmission line. A tree would be considered a danger tree if it would contact any of the conductors should it fall (see Figure 1), bend (see Figure 2), or grow within a given swing displacement of the conductors within a specified growth period (see Figures 3 & 4). Trees that are both stable and unstable are included.

Stable Tree - Healthy trees which have less than a fifty percent probability of structural failure within the next five years.

Unstable Tree - Trees which have a fifty percent or greater probability of structural failure within the next five years.

Danger Brush - Any tree or other vegetation growing on the transmission right-of-way which comes within the specified distance to the conductor as outlined in Table 1 and shown in Figures 3 and 4.

High Brush - Any tree or other vegetation on the transmission right-of-way which has not yet grown within the specified distance, but may cause problems within two years of growth.

III. PROCEDURE

Danger trees and danger brush are selected for removal based on a specified criteria. The danger tree criteria is based upon applying five years additional growth. It is recognized that if this criteria were fully implemented, all danger tree outages would be the result of stable trees felled by logging activity or above normal storms. Several such outages can be expected annually. It is BPA policy to accept those outages. To prevent them would require removal of many thousands of additional trees.

Programmed danger tree and high brush selection will be conducted in addition to routine observation by patrols.

Normally, danger brush within the acquired right-of-way does not require acquisition of cutting rights. Danger trees off the acquired right-of-way may require the acquisition of cutting rights depending on the easement agreement. In most cases, cutting of the danger

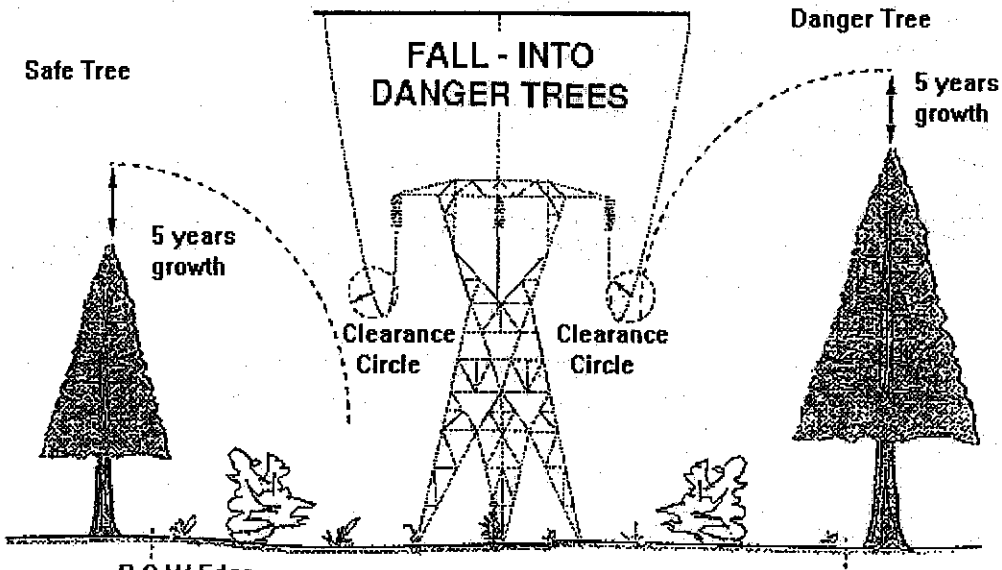
tree or danger brush at ground line is required. However, pruning, topping, or side trimming can be an acceptable substitute for removal of danger trees under special circumstances.

A. Criteria for Danger Trees Selection

1. Fall-into Trees

Fall-into trees are defined as unstable trees which have a fifty percent or greater probability of structural failure within the next five years. A tree will be selected for removal if, when it fails, all or any portion of the tree could contact a powerline conductor or enter the specified clearance circle. (See Figure 1.)

Fall-into trees may display deformations such as forked tops, multi-stems, or past snow and wind damage and show declining vigor. They can also be caused by equipment, erosion, disease, insects, and past damage. Others can result from strips or fringes left by logging. Since a stable tree can quickly become a fall-into tree due to changing conditions, all patrols should be alert to detect them. Remedial action should follow promptly. Contact and cooperation with loggers found working adjacent to a powerline can often prevent the occurrence of fall-into trees.



Scenario:
Unstable DANGER TREES falling toward the conductor.

Unstable TREES with growth added, that when falling would reach into the Clearance Circle will be removed.

Clearance Circle

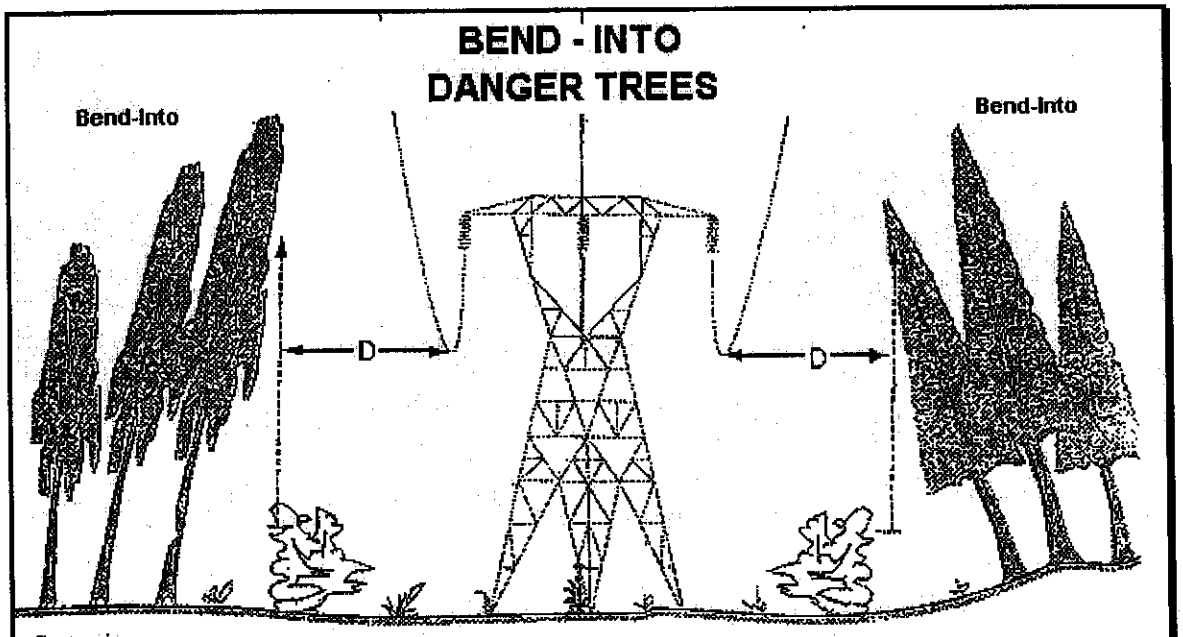
Voltage	Diameter
69 kV	3 ft
115 kV	3 ft
161 kV	4 ft
230 kV	6 ft
345 kV	6 ft
500 kV	10 ft

Note:
Unstable trees which could fall toward the conductor have 5 years growth added to their height.

FIGURE 1

2. Bend-Into Trees

Bend-into trees are defined as trees which have tops or branches that could bend down into a powerline conductor during normal snow or ice loading for the local area. (See Figure 2). These trees are typically of small diameter and tall height. Programmed danger tree selection for bend-into trees will focus on areas that have had historic occurrences of heavy snow and ice loading. Bend-into trees will be selected for removal.



Scenario:
Snow load, wind or other factors causing tops or branches of DANGER TREES, off R.O.W., to bend into the Safety Zone.

Snow load, wind or other factors causing tops or branches of BRUSH, on R.O.W., to bend into Safety Zone.

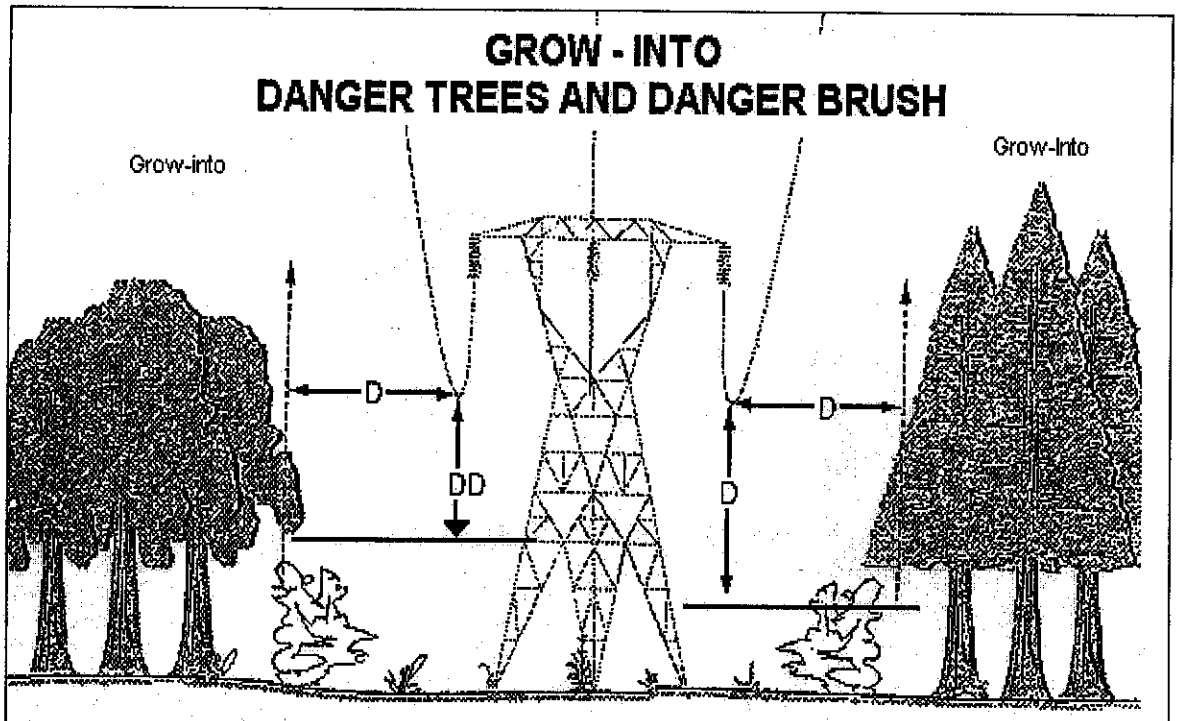
Voltage	Distance "D"
115-kV & less	16 ft.
230-kV	17 ft.
345-kV	20 ft
500-kV	25 ft

Note:
The clearance values include an allowance for conductor movement.

FIGURE 2
BRANCHES OR TOPS BENDING WITHIN MINIMUM DISTANCE OF THE CONDUCTOR

3. Grow-Into Trees

Grow-into trees are defined as trees off the right-of-way which can grow branches horizontally within a specified minimum distance of a powerline conductor. (See Figure 3). Stable grow-into trees can be side trimmed as an option to removal.



Scenario:
DANGER TREES, off R.O.W., having branches growing into the Safety Zone.

BRUSH, on R.O.W., having branches or tops growing into the Safety Zone.

DANGER BRUSH		HIGH BRUSH & DANGER TREES	
Voltage	"DD"	Voltage	"D" (distance)
115-kV & less	9 ft.	115-kV & less	16 ft.
230-kV	10 ft	230-kV	17 ft
345-kV	12 ft	345-kV	20 ft
500-kV	14 ft.	500-kV	25 ft

Note:
The clearance values include an allowance for conductor movement.

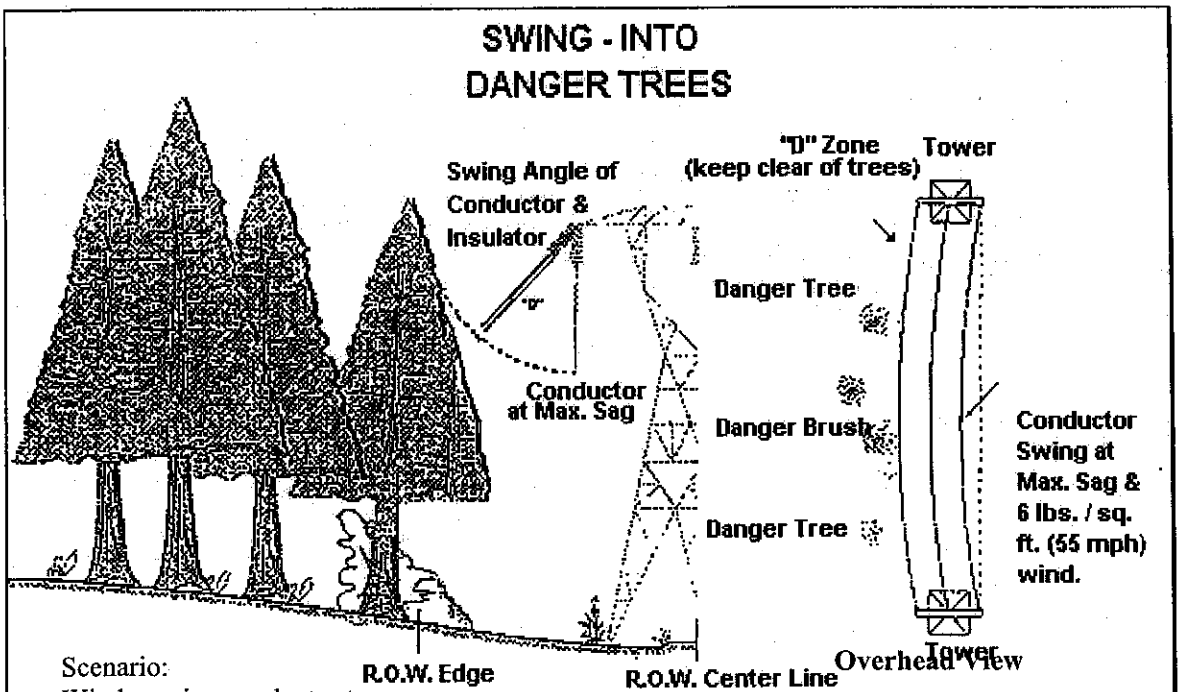
FIGURE 3
BRANCHES OR TOPS GROWING WITHIN MINIMUM DISTANCE OF THE CONDUCTOR

4. Swing-Into Trees

Swing-into trees are defined as trees which can be contacted by a swinging conductor, i.e., a conductor displaced from its rest position by a transverse wind. (See Figure 4). Swing-into trees which have been contacted by a powerline conductor will be selected for removal. Stable swing-into trees can be side trimmed as an option to removal. Spans with a history of swing contacts may be targeted to have all trees cleared within the calculated swing distance .

Swing contacts are rare because the sheltering effect of bordering trees suppresses conductor swing. They are most probable on long spans where the middle part of the span is exposed and the ends are closely bordered by trees, or where isolated trees have grown up alongside a long span. Logging or isolated tree growth could potentially create new swing-into trees. Otherwise, lines which have not had swing contacts for ten years or more are not likely to have them in the future.

Patrols should watch for swing contacts and when found, remedial action will be undertaken immediately.



Scenario:
Wind causing conductor to blow into trees off R.O.W.

When this occurs trees should be considered for removal to the maximum swing position plus the "D" distance.

SAFETY CLEARANCE

Voltage	Distance "D"
115-kV	13 ft
161-kV	14 ft
230-kV	15 ft
345-kV	17 ft
500-kV	18 ft

Note:
"D" distance provides clearance to prevent flashovers.

FIGURE 4

B. Criteria for Danger Brush Selection

Danger brush is defined as on right-of-way trees and other vegetation that can grow vertically or horizontally within the specified minimum distance of the conductor. (See Table 1 and Figure 3.)

Selection of danger brush will be based on the minimum vertical distance between branch tips and conductor with both at rest. Along with arcing distance, the distance must include allowance for movement during storms, measurement error, changes in sag, and worker safety.

TABLE 1
RIGHT-OF-WAY MAINTENANCE CRITERIA FOR TREE CLEARANCE

DANGER BRUSH * (CORRECT IMMEDIATELY)		**HIGH BRUSH** (CORRECT WITHIN THE GROWING SEASON)	
Voltage (kV)	**Vertical Clearance (FT)**	**Voltage (kV)**	**Vertical Clearance (FT)**
115 & Below	9 or less	115 & Below	16 or less
230	10 or less	230	17 or less
345	12 or less	345	20 or less
500	14 or less	500	25 or less

* All reports of Danger Brush should be removed by the patrol crew while they are on site , or scheduled for removal within the immediate future. This is a commitment BPA has made to the Secretary of Energy.

In addition the following table may be used to determine sags to aid in the selection process for danger tree/danger brush. In special cases, actual sags for specific spans can be obtained from Technical Services, Lines and Facilities.

Sags and differential sags are intended to aid in the selection of danger trees/danger brush for removal.

Sags for Danger Brush Determination

Sags and differential sags are intended to aid in identifying danger Brush for cutting.

Lattice Steel Construction Chukar Conductor MWT=19000# @ 0.5-8-0				**Wood Pole Construction Narcissus Conductor** MWT=8000# @ 0.5-8-0			
Span Length	**Sag @ 100°C Conductor Temp.**	**Sag @ 0°C Conductor Temp.**	**Change in Sag**	**Span Length**	**Sag @ 100°C Conductor Temp.**	**Sag @ 0°C Conductor Temp.**	**Change in Sag**
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1200	47.2	34.7	12.5	600	23.0	15.2	7.8
1350	58.4	44.5	12.9	750	32.5	24.1	8.4
1500	68.7	55.4	13.3	900	43.9	35.1	8.7
1650	81.2	67.6	13.6	1050	57.3	48.3	9.0
1800	94.8	81.0	13.8	1200	72.9	63.7	9.2
1950	109.7	95.7	14.0				
2100	125.9	111.7	14.2				

The sags assume a level span with the conductor and design tensions as shown.

Michael L. Staats, Manager
Transmission Line Maintenance

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TITLE: **REPORTING OF ENCROACHMENTS AND HAZARDOUS CONDITIONS**			**PT 07 05 92-05**
REVIEWED BY: TLM Tech. Svc APPROVED BY: Mike Staats	SPDS: 4/27/98	DATE: 8/27/04	PAGE: 1 of 6
INDEX KEY WORDS: Danger, Safety, Rights, Encroachments, Patrol, Dumping			
REFERENCE DOCUMENTS: PT 02 03 91-02			

I. BACKGROUND

The intent of this Procedure is to assure prompt reporting of hazardous conditions and encroachments so that outages may be avoided, BPA's land rights may be maintained, and public safety is not compromised.

II. DEFINITIONS

A. Encroachment:

Any new non-BPA construction, facility, tree planting; or dumping of household refuse and industrial waste on the right-of-way. This is the case whether the right-of-way is occupied by a BPA transmission line or is vacant.

B. Hot Encroachment:

An encroachment that is discovered while it is under construction, or one which may pose serious public safety risks. Industrial waste should be treated as a Hot Encroachment.

C. Hazardous Conditions (non-encroachments):

Those conditions that if not corrected could result in an outage or danger to the public.

D. Household refuse:

This might include furniture, household cleaners, solvents, paint and pesticides, garbage and other common household substances.

E. Industrial Waste:

Includes, but is not limited to, containers of chemicals, paint, pesticides or spent solvents, sludge, burn sites, building materials, vehicles or storage tanks.

III. PROCEDURE

A. Reporting by Helicopter Patrol

1. Hot Encroachments

Timely reporting is imperative. It is less costly for both the encroacher and BPA if the encroachment can be stopped while it is under construction. Hot Encroachments must be reported in writing on the day they are discovered.

A preliminary written encroachment report of Hot Encroachments shall be completed by the helicopter observer to the fullest extent possible using BPA Form 4300.22 Encroachment Report. It shall be clearly marked "Preliminary - From Helicopter Patrol." The preliminary report prepared in the field is not to include any written recommendations.

The helicopter observer will notify the District Foreman by phone or radio and Fax the Encroachment Report to the field Realty Specialist (RS) and Foreman III. The helicopter observer shall maintain a file of current FAX and phone numbers of District Foremen and Realty Specialist's. If Fax facilities are not available, a phone call to all of the above, followed by Fax or express mail is acceptable.

Timely reporting to the Realty Specialist is essential to enable them to quickly evaluate BPA's rights. BPA's actual land rights are determined by specific contract language which may be different for each parcel of land. An encroachment may be something that BPA can not prohibit under its contract with the land owner, or it may be something for which BPA has given permission.

If the helicopter can not safely land to allow investigation of the encroachment, the following minimum information must be included in the Preliminary Encroachment Report: Line Name, Maintenance District, Date, Location (approximate distance AHOL or BOL from nearest structure, and which structures the encroachment is between), and a sketch showing the approximate relationship between structures, conductors, and encroachment. In addition, the Realty Specialist and the District Foreman shall be notified immediately so that ground personnel can be dispatched for an investigation.

If the helicopter can safely land to allow investigation of the encroachment, Part I (Identification) through Part V (Owner of Encroachment) of the Encroachment Report form shall be completed. Mark on the form as "estimates" any dimensions which are estimated. The preliminary encroachment report shall include on the back, a sketch showing the location of the encroachment in relation to the nearest BPA structure and the conductor.

2. Any Other Encroachment

For any other encroachment, a preliminary written encroachment report shall be completed by the observer to the fullest extent possible using BPA Form 4300.22 Encroachment Report. It shall be clearly marked "Preliminary - From Helicopter Patrol." The preliminary report prepared in the field is not to include any written recommendations. The report will be submitted by regular mail to the District Foreman, and the Realty Specialist.

If the helicopter can not safely land to allow investigation of the encroachment, the following minimum information must be included in the Preliminary Encroachment Report. Line, Name, Maintenance, District, Date, Location (approximate distance AHOL or BOL from nearest structure, and which structures the encroachment is between), and a sketch showing the approximate relationship between structures, conductors, and encroachment. In addition, the Realty Specialist and the District Foreman shall be notified so that ground personnel can be dispatched for further investigation.

If the helicopter can safely land to allow investigation of the encroachment, Part I (Identification) through Part V (Owner of Encroachment) of the Encroachment Report form shall be completed. Mark on the form as "estimates" any dimensions which are estimated. The preliminary encroachment report shall include a sketch showing the location of the encroachment in relation to the nearest BPA structure and the conductor.

If the encroachment is major, such as a house, barn, garage, or any major structure (1,000 cubic feet or greater) note that it is major on the encroachment report and expedite the report through the system. Include video image from all angles and/or still photos if possible. Also include the approximate age of the structure or at least an indication if it is fairly new or very old.

3. Hazardous Conditions

Hazardous Conditions shall be reported immediately. If the condition could cause an outage it shall be reported to the Dispatcher and District Foreman. The Natural Resource Specialist or Realty Specialist should also be notified if the hazardous condition falls into their area of responsibilities. All other conditions shall be reported to the District Foreman. It is the responsibility of the helicopter observer to assure that the proper reporting occurs. The report to the Dispatcher or the District Foreman shall include the observer's assessment of the gravity of the hazard.

B. Reporting by TLM Personnel

1. Hot Encroachments

A preliminary written encroachment report of Hot Encroachments shall be completed by the Crew during the patrol using BPA Form 4300.22 Encroachment Report. It shall be clearly marked "Preliminary - (Name of Reporting Person). The preliminary report prepared in the field is not to include any written recommendations. The report will be Faxed or hand delivered if appropriate, to the District Foreman, and the Realty Specialist, who will take appropriate actions, insuring that the pertinent authorities are aware of the situation.

Part I (Identification) through Part V (Owner of Encroachment) of the Encroachment Report form shall be fully completed by the crew. The encroachment report shall include a sketch showing the location of the encroachment in relation to the nearest BPA structure and the conductor.

2. Other Encroachments

For any other encroachment a preliminary written encroachment report shall be completed by the crew using BPA Form 4300.22 Encroachment Report. It shall be clearly marked "Preliminary - (Name of Reporting Person)." The preliminary report prepared in the field is not to include any written recommendations. The form will be submitted to the District Foreman, and the Realty Specialist.

Part I (Identification) through Part V (Owner of Encroachment) of the Encroachment Report form shall be fully completed by the crew. The encroachment report shall include a sketch showing the location of the encroachment in relation to the nearest BPA structure and the conductor. Include video images or photos from all angles, if possible.

If the encroachment is major, such as a house, barn, garage, or any major structure (1,000 cubic feet or greater) note that it is major on the Encroachment Report and expedite the report through the system. Also include the approximate age of the structure or at least an indication if it is fairly new or very old.

3. Hazardous Conditions

Crews on working patrol shall correct all hazards that they are capable of correcting. All hazards will be reported immediately to the District Foreman, Natural Resource Specialist, or Realty Specialist, depending on the nature of the hazard. If the hazard could cause an outage, the Dispatcher will be notified. Potential hazards scheduled for correction at a later date shall be noted on the regular work patrol form.

C. Regional Processing of Preliminary Encroachment Reports

The preliminary encroachment report shall be forwarded from the line crew or helicopter observer to the Forman III for finalization. A final encroachment report (with "FINAL" so noted on the form), along with the Foreman III recommendations (Part VII of form) shall be forwarded to the Realty Specialist. In the case of Hot Encroachments this should be hand delivered or faxed as soon as possible.

In the case of dumping of hazardous materials or significant household waste, a copy of the encroachment report will also be forwarded to the Manager for Pollution Prevention and Abatement (Org. Code KEP), as soon as possible.

D. Specific Guidelines For Vagrants

Because occupancy of BPA property by vagrants frequently results in contamination from household refuse, BPA Security Management Office will be referred issues dealing with vagrants and itinerants trespassing on BPA property, once the Realty Specialist verifies that the occupancy is on BPA fee-owned property. BPA Security Management Office will be responsible for notifying local law enforcement, and ensuring removal.

Michael L. Staats, Manager
Transmission Line Maintenance

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